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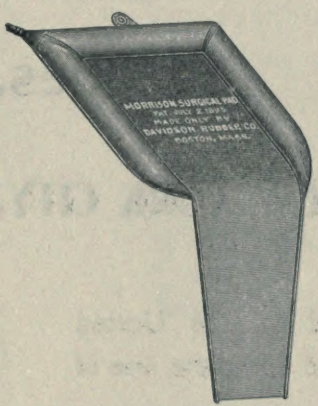

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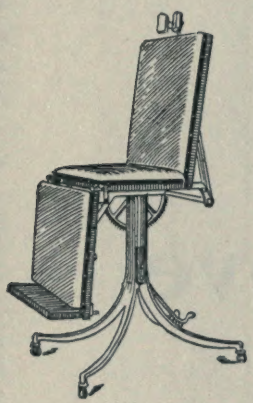

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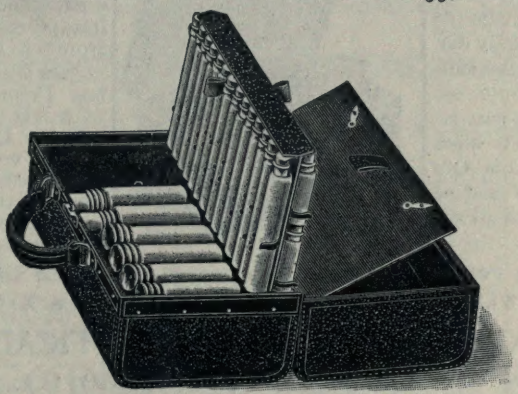

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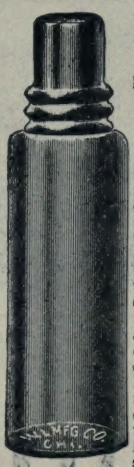

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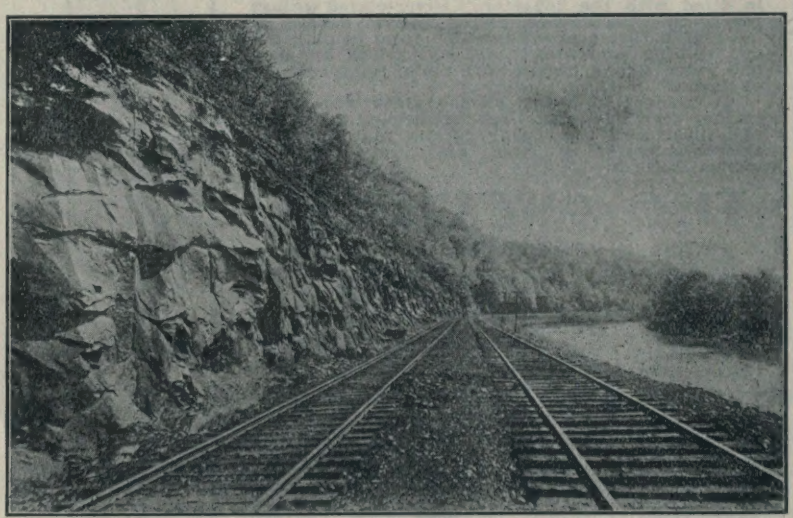

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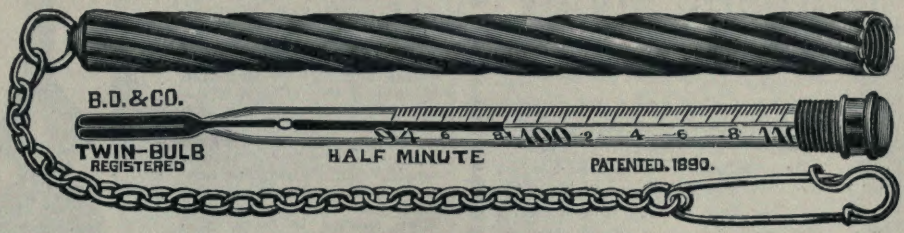

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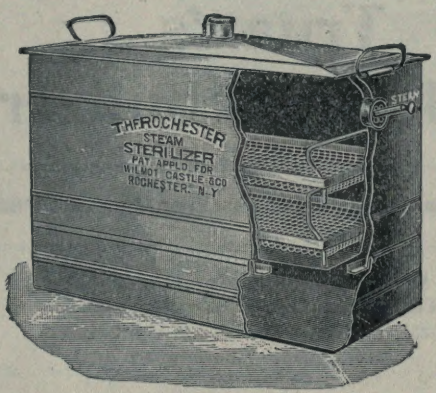

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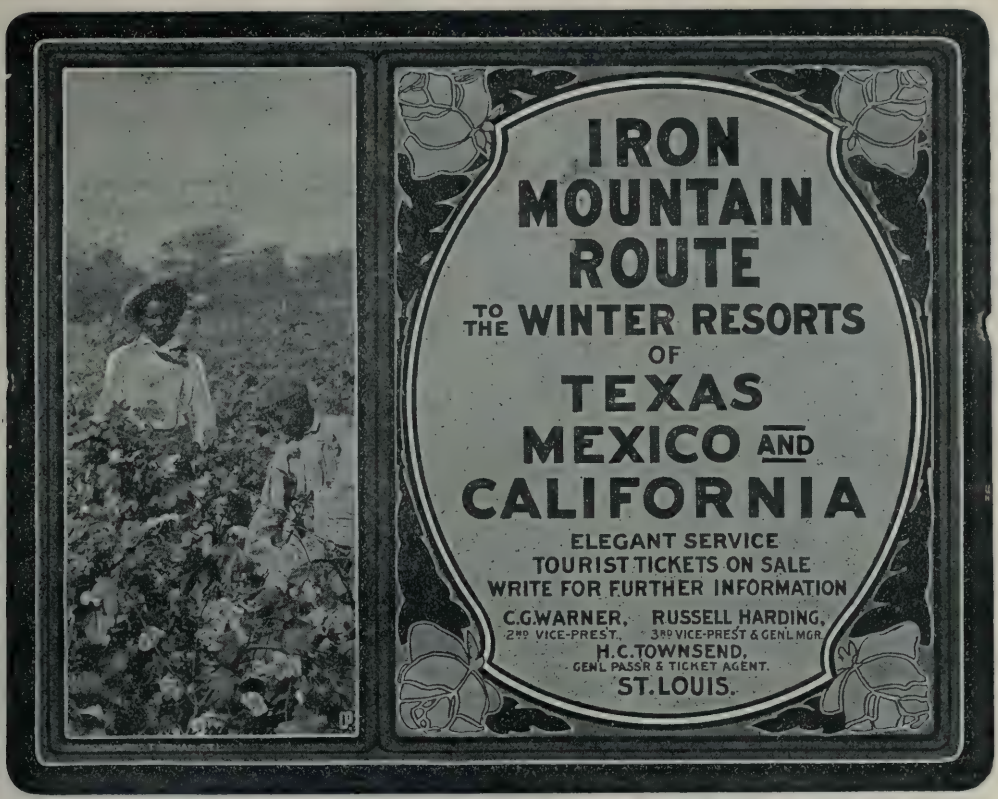

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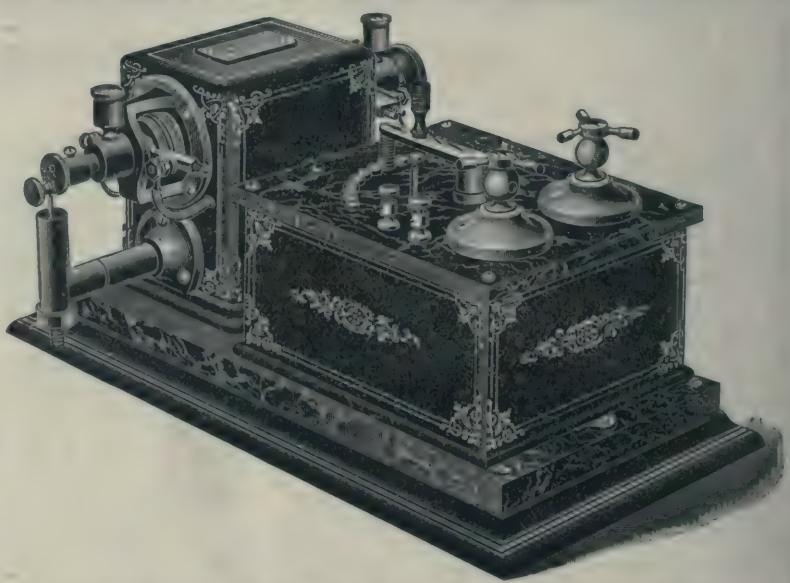

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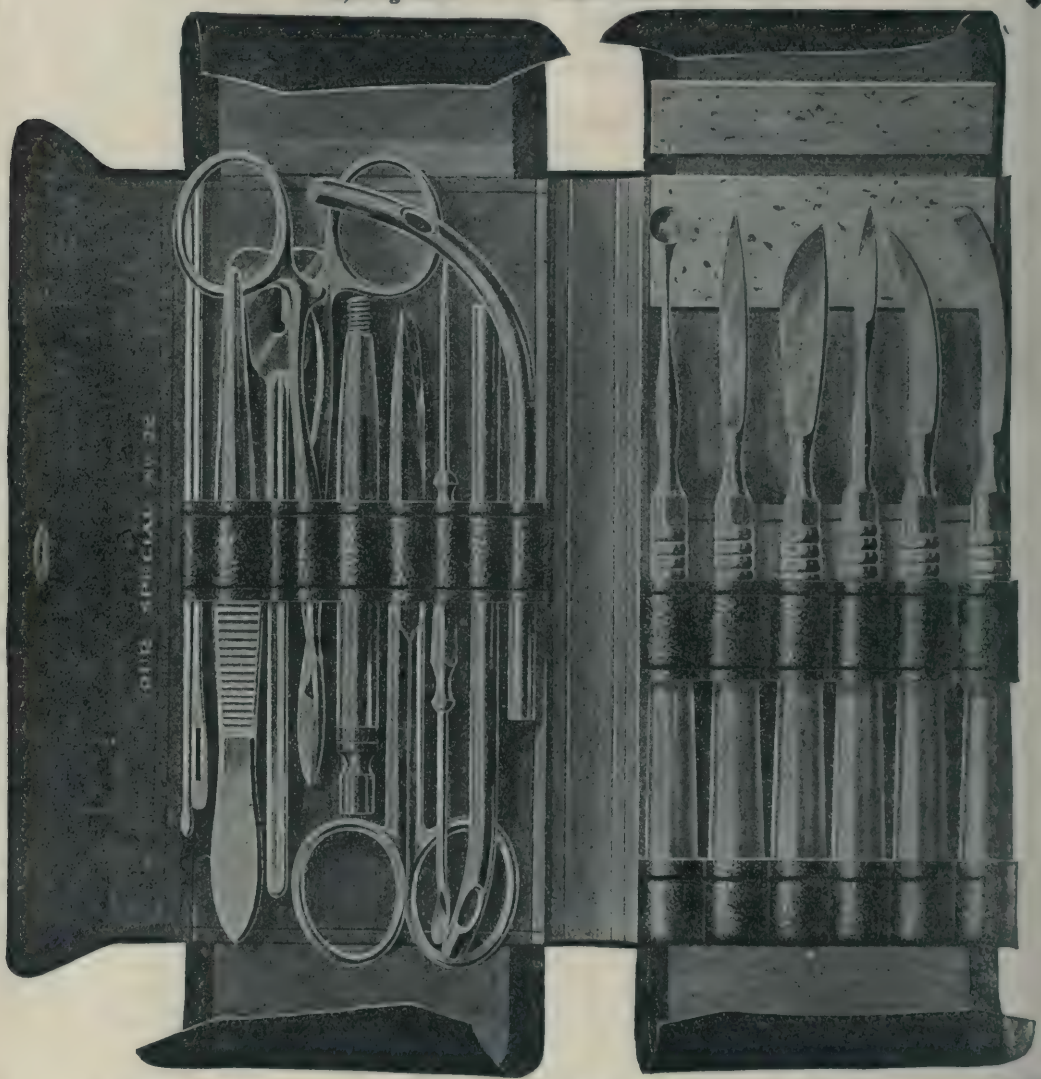

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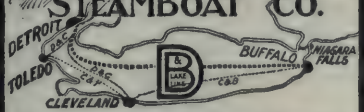

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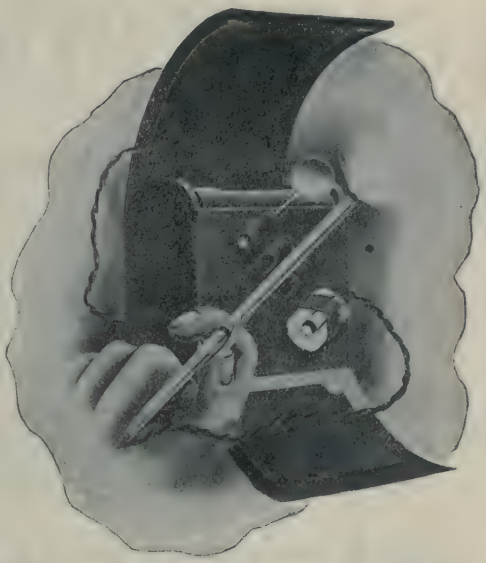

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DETROIT MEDICAL JOURNAL

ORIGINAL ARTICLES

DISEASE OF THE THYROID GLAND AS A CAUSE OF FUNCTIONAL SENSORY DISORDERS.*

BY E. L. SHURLY, M. D.,
Detroit, Mich.

In discussing diseases of the Thyroid Gland there come to mind ordinarily the conditions known as Bronchocele (common Goitre,) Exophthalmic goitre (Graves' disease), Acquired Atrophy of the Thyroid Gland, (Myxœdema) and Congenital Atrophy (Cretinism). While at the same time one may be reminded in this connection of the many questions relating to the unknown abnormalities of the adjacent thymous gland which are supposed to be the cause, at least partially, of infantile marasmus, laryngismus stridulous and various nutritive disorders such as arthritis deformans, hyperostosis, etc. But the various degrees of functional derangement and the lesser degrees of structural alteration which may occur is seldom or never kept in mind! It is not my object, however, to take the time to discuss at length the several forms of goitre or the various clinical pictures supposed to be connected with the intimately connected thymous gland, but in order to reach the practical points which I desire to present for your consideration, it will be necessary to briefly allude to some phase of the subject in general terms. In the first place, it must be remembered that the thyroid gland has been found with two distinct classes of change, denominated hypertrophy and atrophy, each of which presents phenomena in accordance with the interference or suppression of its secretion.

The structural aspects, aside from the mechanical effects of pressure upon adjacent parts, have little to do with the clinical history of any given patient unless the function of the organ, namely its secretion, is altered or diminished. Thus we may have a considerable degree of hypertrophy without any particular physiologic derangement, or a comparatively small amount of atrophy associated with dangerous symptoms if the colloid secretion be suppressed or altered very much.

The pathology of exophthalmic goitre

*Read before the Shiawasse County Medical Society, November 11, 1902.

is fraught with vexatious problems, for it is still a matter of controversy whether the essential pathogenesis of this well-known disease is to be attributed to disease of the central nervous system, the cervical ganglia of the sympathetic, or to the thyroid gland itself. A majority of pathologists and clinicians probably lean toward the theory that the gland itself is the primary seat of the disease, notwithstanding, as you well know, that quite a number of cases are on record of alleviation or cure from surgical operations performed on the sympathetic nerve or its ganglia; and although as a matter of fact the secretion of the thyroid gland contains constituents which are absolutely necessary to the nutrition of the body, integrity of the blood, and the central nervous system, yet upon what the biochemical effects of this—as well as the other internal secretions—upon the economy depends, has not yet been precisely discovered,—for this rich field of physiological chemistry has been but recently opened up. To cite an example of what may be expected, I would mention the recent discovery of a third very important secretion or ferment produced by the pancreas, which is of such vital importance that its deficiency or absence deranges the whole line of chemical action connected with the digestion and assimilation of the hydrocarbons; also, the discovery of new internal secretions or ferments produced by the liver, spleen and intestines. In the light of these expositions, therefore, it is not too much to assume that the full or complete function of the thyroid gland has not yet been accounted for. It is noted, for instance, that certain cases of hypertrophy presenting great augmentation of the stroma are not productive of the clinical signs of exophthalmic goitre, while other instances presenting intense fibrosis with atrophy of the thyroid vesicles very promptly and constantly give rise to neuroses and general nutritional changes of a threatening character.

Besides this, there are instances on record of speedy death following the introduction by accident of the normal thyroid secretion into the blood, thus illustrating the toxic character of this secretion when introduced directly, instead of through the lymphatic vessels into the blood. If these several observations therefore be correct, we must conclude that the various internal secretions—especially of the thyroid gland—may be either soluble toxines or ferments, belonging to the class of "soluble ferments." If, as Schneider has well said, "Life consists of a consecutive line of constructive fermentation," the obverse may be as axiomatic—that disease consists of a consecutive process of retrograde or destructive fermentation. Recent discoveries have shown that many of the physiological processes which were supposed to be merely chemical or mechanical ones are bio-chemical; for instance, the exchange in the process of respiration between oxygen and carbon dioxide are now known to be accomplished through the intervention of a ferment named oxydase and the ultimate changes of material in the intestine are likewise due to specific ferments, instead of to simple osmosis.

That these ferments do not depend always upon microbiosis is exemplified by the wonderful discovery of Büchner, a you will remember, who ground up growing yeast cells, expressed and filtered their juice and with the expressed fluid was able to induce all the characteristic fermentation produced by these plants in their integrity, thus showing that fermentation may take place without the contact of living organisms. In this connection the discovery of Conheim is highly interesting. He found that he could reverse the order of a given fermentation (malt) by altering the conditions and the material, so that the very same ferment

would reproduce the substance that it had split up. Thus one may conjecture that a physiological process of fermentation might be so altered by conditions as to become a morbid process and develop disease.

When we reflect upon the continuous additions to our knowledge which are being made by physiologic-chemistry, biology and bacteriology, such as the demonstration of the hitherto unknown bodies called lysins and toxines as recently brought out by the study of "immunity", it ought not to surprise us to learn that many of the obscure and complex groupings of the symptoms of disease both classified and unclassified may be actually due to alterations of these internal secretions or their accompanying enzymes. Take for instance, the colloid secretion of the thyroid gland. It was formerly supposed to consist mainly of mucin and salts. It is now stated to contain besides its several albuminoid or proteid constituents, its thyreoitoxin and salts, iodothyrin, iodin, xanthin, hypoxanthin, inosit, creatin, and sarcolactic acid. It is therefore a highly complex substance. Now if in its integrity as an internal secretion normally passing through the lymphatic system into the blood, the thyroid secretion is absolutely necessary to the welfare of the economy, it seems obvious that, should any untoward change take place—not only in its quantity, but in its quality—either chemical or molecular, according to degree, a corresponding disturbance in the physiologic processes of the body will follow. That this does occur more often than is observed, I am convinced, and it is undoubtedly the foundation of several of the neurotic and hæmic disorders, which at times seem so obscure in their origin.

Take for example, the well-known disease called Exophthalmic Goitre—never endemic, never climatic. What are the paramount signs? Tachycardia, great nervous perturbation, deposits of fat in the orbits and elsewhere in the body, lymph and blood changes. We meet with cases however, in which one or more of these classical signs are absent or not salient, characterized by paræsthesia, insomnia, anæmia, so-called hypochondria, dyspepsia, gastroptosis, etc. It is to these affections that I desire to call your attention. The so-called hypochondria and persistent hysteria are well known to every practitioner. How often do we fail in tracing their origin? I believe that hypochondria, paræsthesia and persistent hys teria are among the most puzzling complaints which beset the practitioner.

Reflection upon the analogy between the early syndromes of obscure cases of hypochondria and paræsthesia and those of exopthalmic goitre led me first to the hypothesis and then to the observation that the great sympathetic and its connecting ganglia were in many instances the principal field of disturbance, and although often no material change in the structure of the thyroid gland could be observed, yet some derangement of the character of its secretion might possibly lie at the foundation of the disorder. That this conclusion is not without a basis, clinical experience has demonstrated, for a number of cases have been relieved by pursuing a therapy on the lines of such an assumption, viz.: That where a disease of the thyroid gland, with alteration of its colloid secretion, existed, the administration of either thyroid extract, or iodin, more or less combined with potassium nitrate, hyoscyamous, chloral hydrate or camphor monobromate has seemed to prove the truth of the deduction, in some cases.

Indeed, the treatment of many cases of paræsthesia pharyngea especially in this way, has been very satisfactory. In conclusion, I will relate briefly one case of so-called hypochondriasis with pharygeal paræsthesia:—An intelligent young

man, twenty years old, of good habits, consulted me for a growing complaint referable to his throat. The symptoms consisted of a sensation of choking, burning, itching, and a feeling of soreness. These symptoms had no relation to his eating or digestion; were not regularly intermittent nor remittent. His mentality was normal—excepting that he worried about himself and thereby became depressed. By introspection he imagined at times that all sorts of diseases were coming upon him. Like all such patients, he felt (as he should not, of course) the ordinary physiological processes going on in the body—especially of the stomach and intestines, and thought them to be morbid signs. No structural derangement of any of his organs could be made out. There was no abnormality of the pharynx, larynx nor respiratory organs. The heart seemed normal, but disturbed in rhythm (tachycardia, etc.) He suffered somewhat from insomnia, although having a responsible commercial position he was not over-worked nor over-worried in that respect. No mental or physical trouble could be found to account for his condition: although no abnormality of the thyroid gland could be observed, yet he was treated with extract of thyroid gland and iodine, alternately, week about. In addition, hydrate of chloral was given once daily, to act upon the sympathetic nerve. The extract of thyroid gland disturbed the circulation and excited him during the first week of its administration, but soon showed no untoward effects. At the end of the second week he began to improve rapidly and no chloral hydrate was taken by him after the first week. At the end of five weeks he was practically well and has since continued in health. Where there is any evidence of thyroid hypertrophy, potassium nitrate ought to be administered, first for a period of a week or ten days: after that, iodine in doses of one-twelfth of a grain, either alone or in alternation with thyroid gland extract. When tachycardia and vaso-motor disturbances are very prominent symptoms, the iodine and chloral hydrate are especially indicated. These clinical observations and the therapy based upon them would seem more empirical than scientific. However, the multitudinous observation of sympathetic nerve-disturbance following fibrosis of the thyroid gland and consequent alteration of its secretion, and the fact that the functional disorders of sensation noted in paræsthesia and hypochondria are likewise coupled with disorder of the sympathetic system or sensory centres would give a rational character to the conviction that either a certain degree of diminution of the thyroid colloid secretion or its alteration, might often be held responsible for the pathologic phenomena in question.

32 Adams Avenue, West.

Easy To Try.—The *Family Doctor*, a London publication, reports the following case: A young girl for four days without cessation from singultus, the attack being due, apparently, to some gastric disorder. When she put out her tongue for a few seconds it was found the hiccough ceased. She was then ordered to stick out this member at regular intervals for a few minutes, at the termination of which only a few slight spasms followed. She was then ordered to repeat, when the singultus ceased altogether, and did not again return. It, therefore, would seem to be proper to try continuous or rhythmic traction of the tongue in these cases.

Old Peoples' Colds.—The *Southern Practitioner* suggests the following as a remedy:

℞ Spt. ammon. aromat, f ℥ i.
Spt. chlorof., f ʒ ii.
Aq. menth. pip., q. s. ad f ℥ iii.
M. Sig. Teaspoonful every four hours.

THE MENOPAUSE. — ITS SIGNIFICANCE, WITH DEDUCTIONS THEREFROM.*

BY M. V. MEDDAUGH, M. D.,
Detroit, Mich.

In glancing over the almost endless list of topics related to medicine and surgery, it occurred to the essayist that the time of this society might for one session be profitably employed in considering that interesting and important event of woman's physical life, viz., the Climacteric, or Menopause.

With its general features and predominating characteristics, and also as an invariable phenomenon of a particular period in the life of the female, we are all more or less familiar.

Clinical and physical observations, however, as made by careful investigators, seem to justify the statement that we have failed to fully recognize its significance and appreciate the duties and responsibilities that we assume as medical advisers to the woman. Certainly, we have greatly underestimated its influences and far-reaching effects, not only on her physical being, but on her mental and moral state as well. What is the true nature of this process that so markedly and invariably produces such an impression on the threefold nature of the woman? We have been too prone to look upon the climacteric phenomenon or condition as a vast congerie of symptoms with little or no consideration of their basic or underlying causes. These "flashes", these hemorrhages, etc., we correctly attribute to disorders of the circulation. The cardiac palpitations, the various hystero-neuroses and psychical disturbances we rightly associate with disorders of the nervous system, and on this symptomatic standpoint base our therapeutics.

Surely this is a most superficial view of the situation, impractical and unscientific, to say the least. Should we not go a little further back into the etiological fundamentals and ask *why* the circulatory or nervous variations stand as the immediate causative factors of such a multiplicity of symptoms as characterize the menopause?

We note the abnormal cell proliferative activity, with greatly increased tendency to pathological growths, tumors, etc. Have we earnestly and diligently investigated the reason for such? Have we inquired as far as possible as to *why* our patient has, during the progress of this period suddenly developed an unusual mental and moral condition? No doubt, like many other perplexing problems in medicine and surgery, interrogations similar to these have often crossed the mental sky, but who has clearly discerned the answer? To the essayist, it appears that a correct conception of the nature of menstruation and its associate relation to ovulation, with a proper knowledge of the physiology of the ovary, will illumine this hitherto more or less obscure, but interesting field.

As is well known, the older physiologists believed that menstruation and ovulation occurred synchronously. Later, it was learned that while generally they were processes closely associated, they frequently appeared at times entirely distinct and separate and that, in fact, menstruation was more or less a secondary phenomena. Following this, came a deeper study into the nature and function of the ovary—the result of which has thrown much light and definite information on ovulation, menstruation, puberty and the menopause, all being directly related and influenced by the presence or absence of the ovary and its functional resultants. It has been shown that long before the appearance of the menstrual flux—one of the objective indications of puberty—the ovary is functioning and ovulation is normally occurring.

Within the past few years, evidence of a most convincing kind has accumulated

*Read before the Clinton Co. Medical Society at St. Johns, Mich., October 6, 1902.

to attest the fact that the ovary has another function of equal significance in many ways with that of ovulation—a function with not only an essential bearing on reproduction, but a marked influence on the metabolic processes of the entire body, the suspension of the action of which accounts for the many hitherto mysterious and pronounced changes and phenomena of the menopause. That its function in this respect is closely related to that of the thyroid gland, the thymus gland and others of the kind, comes with most convincing evidence as a result of careful observations of distinguished writers of this and other countries. Over 100 years ago, King, of London, showed that the colloid substance of the thyroid passed directly into the lymphatic system. Fifty years later, Schiff not only corroborated this, but proved the secretion of a substance which greatly influenced cellular metabolism. You are all fully cognizant of the present information we possess in this direction and its inestimable value to us. Now to be brief and to the point, there exists equally convincing proof that the ovary in a similar way secretes a substance which reaches the circulation and exercises a potent influence on the life of a woman; that the normal physiologic action and growth of the generative system is due to its presence that when the life-limit of the secreting power of the ovary has been reached, and a diminished amount is thrown into the lymphatic system, the metaboletic changes peculiar to the climacteric immediately appear. The enumeration of the multiplicity of distressing symptoms that may present themselves at the menopause is not necessary here. You are familiar with them. The theory of this especial function of the ovary and its influence on tissue change is, as has been heretofore stated, based on the mode of reasoning accepted in regard to the function of the thyroid, etc. It does appear as reasonable as many others of the commonly understood principles of physiology, and with as convincing proof. True, no one has ever seen the ovary in process of secreting this substance; no one has isolated it on its way to build up the generative system and to preserve cell-integrity of the structures. Neither has any one observed its gradual withdrawal from the system, and actually noted the inevitable cellular changes and phenomena of the menopause as a consequence.

Muret, several years ago, presented some fundamental and well-known facts bearing on the question; since then, other evidence more convincing and highly corroborative has accrued. Among the principles to which reference has been made may be mentioned:—

1. In congenital ovarian absence, there is no uterine development or menstruation, and it might be said, an entire absence of that which makes the woman's nature distinct.
2. Ablation of ovaries in the young causes them to grow up without any feminine attributes.
3. Complete ovariotomy after puberty is followed by cessation of menses, atrophy of the genital organs, and a precipitation of the menopause.

The non-realization of this function of the ovary and the deplorable results of depriving certain cells of its influence, created an inviting field for the ambitious, but unthinking gynecological surgeon of the closing years of the 19th Century—"A change has come, however, over the spirit of his dreams", and we see the pendulum of conservatism propelled by knowledge now rapidly assuming its proper position.

The writer was privileged, while at the Post-Graduate Medical School of Chicago, a few months ago, to be present at an interesting surgical procedure, strongly illustrative of present ideas relative to the influence of the ovary on the meno-

pause. In this case, the woman was probably 25. She had had double ovariotomy performed two years before, with the most distressing line of symptoms characteristic of the climacteric following. Circumstances had arisen whereby it was highly desirable that she should bear a child. What was the surgical operation? Another woman, whose abdomen was to be opened, was brought into the amphitheater. Two portions of ovarian structure were removed. Immediately following this, the patient in question, by abdominal section, and by a method of transplantation, had these sutured to the site formerly occupied by her own ovaries. The same surgeon had performed this operation in another case; menstruation occurred in three months, and every symptom of the menopause disappeared.

Another fact that has been demonstrated is that the ovary will exert its peculiar influence on the menopause just as effectually, whether in the process of transplantation it be attached at its normal location or any other remote place within the abdomen or pelvic cavities. One other result of experiment—the tiniest piece of ovarian tissue apparently will do the work of a complete organ.

All these observations give a basis for deduction, and indicate certain lines of treatment and management of the climacteric state. Inferring the correctness of the ascribed function of the ovary, the conclusion is accepted that menopausic phenomena are due to a rapid but *natural* physiologic *withdrawal* of this specific *secretion,* thus destroying cell-equilibrium with all the resultant symptoms of the climacteric that verily maketh life a burden to both patient and doctor.

That this physiologic suspension of ovarian activity might not come as a shock to the system and to more gradually accustom the cells to the loss of such influence and control, we find advocates of this theory introducing into the circulation, doses of ovarian extract, with the most gratifying results. This is done, not only to confirm this idea of the function of the ovary, but as a scientific, positive agent in the treatment of the so-called disorders of the menopause. Permit me to cite a few authentic records in this connection:

In La Policlinique, December, '98, C. Jacobs in 51 cases says of the effect of ovarian extract that without any other medication, in every case, troublesome symptoms of the natural menopause either were *entirely* removed or greatly diminished. He further states that its effect on the nervous system was manifest from the first day of administration. In the same year, '98, Mond, in a German publication, records its use with great relief of symptoms in patients where the internal genitals had been removed. Muret speaks of absolute cure or great improvement in nine cases of nervous disorders due to menopause, all exhibiting symptoms of vaso-motor irregularities, insomnia, lumbar pain, flatulency, etc.

Touvenaint says after using the extract: "It is very useful in *all* cases of *artificial menopause* due to removal of genital apparatus." To show that it is valuable remedy in the distressing mental conditions that arise at the menopause, and following complete extirpation of the ovaries, permit me to refer to the *American Gynecological and Obstetrical Journal* of December 10, 1898. In an article written by Stehman,—one written by Jayle in the July and August, '98, numbers of the *Revue de Gynecologie,* and one by Dr. Jack in the October, 1900, number of the International Journal of Surgery, furnished substantial evidence to convince the most skeptical. Reference has already been made in this essay to the effect on the menopause produced by the transplantation of an ovary or a portion of one, all confirmatory of the

idea that the ovary has within it a substance that presides over the generative function of the woman. This is one of the points that the writer wishes to make, and for which it does appear that sufficient evidence has been given. There is, however, another fact of even greater importance than all this; one that every physician should thoroughly realize—the *grave responsibility that rests upon us as advisers to the woman.* We may differ as to questions of theory, but there are some significant features upon which we all do agree in connection with the menopause. Among these are: 1st. The fact that no woman can escape the experience of the climacteric; 2nd. That at that time, most strenuous demands are made upon every department of her nature; 3rd. That with many, it comes in the nature of a shock, thus disturbing the physiological equilibrium to a dangerous degree; 4th—and most important of all—that all this evidently institutes a change in the polarity of cells, with a consequent tendency to pathological conditions such as abnormal growths, tumors, cancers, etc.

"Forewarned is forearmed", and realizing that all this with variations, is inevitably experienced, it appears to be the imperative duty of every physician to institute such methods as will afford the needed fortification and strength to the woman in passing this crucial period of her life. How may this best be carried out? Every woman who in any way falls under our care at a time, though antedating several years the prospective ordeal, should be treated in anticipation of that event. Its significance and inevitability should be briefly, but forcibly presented to her mind. She should be made to clearly understand the absolute advisability and necessity of a perfectly healthful body as a means of withstanding the extreme demands of nature at this particular time, and that *every organ weakened* either by trauma or congenitally, is an *open door* to the ingress of factors that lessen her capacity to withstand the tendency to weakness and disease. She must have good blood, a substantial, controllable nervous system, unimpaired digestion, hygienic habits, etc. Every possible *pathological* condition of tissue should be surgically corrected and at the earliest possible opportunity. Kindly observe the term used —*Pathological* condition. Not *every* relaxed vaginal outlet is pathological, neither is *every* lacerated cervix; no, not even *every* fibroid demands imperatively an immediate removal. Here is where the diagnostic skill of the doctor must be exercised to a definite conclusion. *Generally* speaking, all lesions are a *menace;* they may suddenly develop a dangerous nature and while the woman is yet healthful and strong, should be removed by surgery or appropriate treatment. Do not for a moment infer, because the cervix, vagina or perineum only have been mentioned here, that the generative apparatus is the only one that may be effected. Oh, no! Of course, it is the part most *usually* effected in consequence of the greater prevalence of traumatic causes due to child-birth, etc. The whole physical being of the patient is subject to change at the menopause, and must therefore come under the watchful care of the physician. Periodical examinations should be instituted and no guess-work substituted where actual knowledge can be obtained. From the rectum to the ocular apparatus, nothing must be overlooked or neglected. Like the skillful pilot who guides his craft over the rocks of a dangerous sea, so must the conscientious scientific doctor safely direct the woman over the stormy and perilous ocean—The Menopause.

Madison Apartments,
64 Madison Avenue.

Some Time Ago.—The first "doctor of medicine" was Gulielmo Gordenio, who received his degree from the College of Aosti, in Italy, 1220.—(*Philadelphia Medical Journal.*)

SOME REASONS WHY PSYCHOLOGY SHOULD OCCUPY A PLACE IN THE CURRICULUM OF MEDICAL SCHOOLS.*

BY HIRAM A. WRIGHT, M. D.,
Detroit, Mich.

If the medical profession were in possession of accurate scientific knowledge concerning the nature and etiology of mental disease, there would then be no excuse for me or anyone else to read a paper before you with such a title as that chosen in this instance. That medical men in general are not possessed of such knowledge is an undisputed fact. It is likewise equally true of those who claim to have made a special study of psychiatry, and are regarded by others as experts or authorities on the subject. As proof of this statement I ask you but to carefully and thoroughly read the many articles published in our various general and special journals from time to time, submitted by writers considered competent to deal with mental disease in its manifold manifestations, and to make critical comparisons between the statements made by the various writers. If this is insufficient to convince you, I would refer you to the many text-books on the subject in which so many contradictory opinions appear concerning the nature of insanity, as evidenced by the effort, resulting in failure, made to formulate a satisfactory definition of mental disease. The question may arise, is such knowledge essential to the success of medical men, in the pursuit of their professional work? We answer yes, unless the care and treatment of physical ailment is all that is demanded of medical men. But since we have assumed charge of the field of psychiatry, and presume to care for patients, who suffer from what we choose to designate as some type of mental disease, I maintain that such knowledge is absolutely essential, in order that we may perform our full duty to our patients, and to society. 'Tis true that such patients are seldom treated at home by the family physician, aided by the consulting advice of the specialist. They are usually committed to the care of the staff of some institution supported by the State, and maintained for this special purpose. For this reason, if for no other, society is deeply concerned with the question of how we, as medical men, deal with such patients in our efforts to effect a cure, if a cure be possible. If medical men generally were better informed than they now are concerning the nature of mental disease, do you presume to believe that such a large proportion of insane people would be sent to asylums for treatment as now obtains? I venture to say that there would not. It should not therefore be deemed sufficient in the premises for physicians to be qualified merely to correctly determine the question whether a person is sane or insane. Then, should he presume to treat such a case when the diagnosis of insanity or mental disease is warranted by the conduct of the patient, he must, to be successful in the application of the means to the end in view, have accurate scientific knowledge of the nature of the malady he is dealing with. Just as in the case of diseased states of the physical body, we first endeavor by noting the symptoms manifest, objective and subjective, to arrive at a correct diagnosis of the case, and then based upon our knowledge of the pathology of the disease under observation, we direct our treatment along intelligent, scientific lines. Knowledge of pathology is essential to enable the physician to adopt correct methods of treatment. Diagnosis is not all-sufficient.

How, then, may such knowledge be acquired? By pursuing rational methods of study, and by this we mean that the student should advance from the known to the unknown, just as is done by the earnest seeker for knowledge in any

*Read before the Wayne County Medical Society, Detroit, Mich., November 13, 1902.

branch of scientific research. Let us apply this thought to the study of mental disease, or insanity, and we shall find that the first thing to be known in this connection is, what the mind itself is. It is improper to assume that medical students have acquired this knowledge prior to having matriculated. The fact is they have not, making it more obligatory on our part to teach this during their college course. 'Tis true we teach more or less thoroughly the anatomy and physiology of the brain, but this is not the mind. *Brain and mind are not one and the same.* For this reason the usual method pursued in the teaching of psychiatry is absolutely of no value to the student, so far as acquainting him with the etiology and nature of mental disease is concerned, for the self-evident reason that an irrational method is being, and has been pursued. And to make my statement still more sweeping there has not yet been published in English-speaking countries, a single text-book purporting to be a treatise on mental disease, which is not defective in the same particulars. They all deal with the question of diagnosis and classification, more or less elaborately, but in no instance do they attempt to convey an adequate conception of what they understand the mind to be, as a preliminary to the study of mental disease.

As well might we attempt to teach the pathology of endocarditis to students who know nothing of the anatomy of the heart, or attempt to teach the treatment of appendicitis to those who do not know what and where the appendix is. Since we deem it right and proper in the conduct of our medical schools to give instruction in mental disease to students, does not a common-sense method prompt the idea that we should first give instruction as to what the mind is, and as to the office it fulfills in the economy of man?

To illustrate my contention still further, let me employ for the purpose of illustration, the quite rational course pursued by teachers in their endeavor to impart instruction concerning the nature of diseased conditions of the various organs of the physical body. They first give instruction in anatomy, that the student may know the size, structure, and relations of the several organs of the body. They teach physiology that the student may be familiar with the uses or functions of these several organs in health. After perfecting himself in these branches, the student is advanced to take up the study of pathology, practice of medicine, and surgery. Pray tell me, what progress do you think the student would make if the above order of study were reversed? Who could hope to make satisfactory progress in teaching surgery to students who had not first studied anatomy? Or who might hope to give instruction in the principles of practice of medicine with any degree of satisfaction, to students who had not first studied physiology? Or who can expect to acquire definite scientific knowledge of septic processes who has not first learned more or less of bacteriology? No one. Yet in our present methods, pursued by students and outlined by teachers, in the study of mental disease, the diseased states of mind are undertaken first, and the very important preliminary thereto, the nature of the normal mind, is not, or very seldom, touched upon at all; and after graduation when sworn as an expert to testify as to the mental state of an individual accused of crime, yet who disclaims responsibility on the grounds of insanity, lawyers wonder, and doctors wonder, and the public wonders why experts differ so widely.

Do you wonder that they wonder, when such a state of affairs continues in our medical schools? The student is not to blame for this, the teacher of mental disease is not alone to blame,—though he is the greater sinner, if sin there be,—but the whole teaching faculty is to blame,

in my opinion, since they consider this exceedingly difficult subject, psychiatry, a very impractical subject for the student to devote his attention to, and believe about one hour a week, during the final courses, to be amply sufficient to allow in their schedule of lectures for this purely theoretical subject as they too often choose to term it.

I take the liberty right here of expressing the opinion that we as a profession, under the guiding influence of our medical schools, are drifting, slowly, yet drifting from being regarded as a learned profession of educated men and women, to become a mere money-making lot of tradesmen. There are some notable individual exceptions, enough merely to prove the rule. Ample attention is now given to those subjects which are applicable as bread and butter winners, to the serious neglect of this increasingly important subject, psychiatry, with the result that we are quite uninformed of matters we presume to deal with, and are expected to be familiar with.

Have I not painted the picture truly, thus far? And how may conditions be improved, if defect exists? By introducing into the course of study, and making provision for it in the regular schedule of lectures, regular hours for instruction concerning the nature and office of the normal mind in the human economy, precisely as is now being done with the study of the body and the several diseased conditions to which it is heir. That is what psychology as a science treats of. Two objections may be offered. The first is the element of *Time*. The schedule is already full to overflowing, it is claimed. I urge, take time! It is not imperative that the student should graduate in four years, but it is essential to his successful career as a practitioner of medicine that, during his college course, he shall have a good and broad foundation laid, upon which to profitably continue his post-graduate studies. The second objection possibly offered, is that the subject itself, psychology, is too difficult for the average student to comprehend. To this I offer the comment, that if the study of the normal mind is too difficult for the student to comprehend, what then must be the study of the diseased mind to the same student? Proportionately more incomprehensible. Should we avoid the study of a subject because difficult, yet deem it essential to the proper education of the physician?

Education does not consist merely in the acquisition of knowledge. It implies also the cultivation of the mental faculties. We study history not alone to inform ourselves of what has transpired in the past, but to cultivate memory as well. We study mathematics not merely to inform ourselves of the science of numeration, etc., but also to cultivate reason. We study literature not only to familiarize ourselves with language, but to cultivate ideation as well. Pertinent to this thought, no less an authority than the late Sir William Hamilton, Professor of metaphysics in Edinburg University, said, that it was his opinion that the study of the mind is the best subject to undertake, in order to cultivate the several faculties of the mind of the student. That science which treats of the mind is termed Psychology.

It is not a physical science, but rather is to be considered as that branch of metaphysics which treats of ethics and intellect. We as physicians are not specially concerned with the study of ethics, a division of psychology which treats of morals and criminology, but we are deeply concerned with the study of intellectual processes incident to consciousness, and derangement thereof, constituting insanity. I am well aware that our physiologists attempt to account for consciousness on a physiological basis alone, and assume that the intellectual faculties bear

some sort of a functional dependence upon certain cerebral cortical cells or areas, for their existence, and sometimes assert that these particular areas or centres are possible of localization or demonstration. Unfortunately for themselves, our neurologists and alienists have assumed this hypothesis to be true, and upon it they formulate a theory concerning the nature of mind, in accordance with this unproven assumption. They affirm that a healthy mind implies a healthy brain, and that mental disease in any of its types is dependent upon impaired cortical integrity. In other words it is current belief in medical circles that the mind is dependent for its existence upon the activity of the cortical cells. I, for one, do not accept this hypothesis as true, for the reason that there are many psychical phenomena entirely inexplicable by such a hypothesis. It must be remembered that the strongest proof of the correctness of any hypothesis is its exclusive competence to explain phenomena.

I believe that the whole difficulty lies in the fact that we have assumed that cortical cells in some way preside over intellectual faculties, and have not taken the trouble to prove or disprove the assumption. 'Tis true that were we to be guided herein by the evidence of our senses, this would seem to be the truth. But, things are not always what they seem to be. The sun seems to rise in the east, and set in the west, and seems to move around the earth. But it does not. Nor can it be demonstrated to us through the media of our senses that it does not. We are however accustomed to explain this phenomenon on the hypothesis that the earth is a sphere, revolving on its own axis. This hypothesis satisfactorily explains the phenomenon, hence we say it is true. If the assumption or hypothesis that such intellectual areas exist in the cerebral cortex were true, then we should be able to account for the phenomenon of consciousness on a physiologic basis, and the study of mind would be a part of physiology, and we would have no such science at all as psychology. This is the only conclusion to be drawn from the premises offered.

It is of vast importance in this connection to consider briefly just what psychic phenomena may properly be included in the generic term, mind, and what may not be. The mind is not an entity, but suggests rather the idea of conscious activity only. The idea of elasticity or change is also implied, since we speak of it as being cultivated or developed by educational effort. It is not uniformly subject to similar degrees of cultivation in the individual, nor is the mind of one person developed by the same influence equally rapidly with that of another person. We conceive of it being at rest, or in activity. The mind of one person is cultivated to a much greater degree than that of another. What do we cultivate in an individual by education? Perception, comprehension, ideation, memory, reason, volition, judgment, etc., etc. Then is not this series of intellectual processes taken in the aggregate, a reasonable conception of what the mind is? It may therefore be defined *as a generic term signifying the aggregate of those intellectual processes incident to consciousness which occur in time only, not in space.* These several psychical phenomena, enumerated above, may properly be included in the term mind, and only these. Now what may not be so included? We must not include our five physical senses, sight, hearing, taste, smell and touch—processes incident to consciousness truly, as component parts of the mind, for the reason that they occur in space, as well as time, yet are not subject to cultivation by educational methods or effort, as are the aforesaid faculties. These are physical senses, physiological processes not psychological. The new-born child, if its

visual tracts be healthy, sees just as well and just as much as could Prof. Agassiz, the trained naturalist. But the child does not perceive nor comprehend what he sees, as does one whose intellectual faculties are cultivated. We do not cultivate the senses, they are functionally dependent upon nerve-structure, and are performed equally well by those whose mental faculties are uncultivated, as by those whose faculties are cultivated.

Nor must we confuse instinct with intellect, and include that as a component of the mind, since instinct is inherent in the individual from birth, it is distinctly transmitted by heredity from parent to offspring, while mental faculties are not manifest until later in life, and are the result of environmental training, not heredity. Hence instinct is not a component part in the generic whole, mind.

Nor may we include the emotional states, such as grief, anger, fear, courage, etc., as components of mind. These are states of being, responsive to impressions received in consciousness, not processes employed in the intellectual upbuilding of the individual.

Nor may we include as components of mind, such qualities of character as love, hatred, knowledge, wisdom, justice, mercy, goodness, etc., etc. These are principles, not intellectual processes capable of being utilized in the acquisition of intelligence. They are attributes of the soul, not faculties of the mind. Knowledge is synonymous with intelligence. Mind is synonymous with intellect. We utilize the intellect, i. e., faculties of the mind, to acquire intelligence. Knowledge is an attribute of soul, hence the seat of consciousness is *of* the soul, not *in* the soul—instead of in the brain cells.

The above idea of mind is not that which is currently accepted and taught even by many psychologists, let alone our neurologists and alienists. So far as I have been able to comprehend their teachings, they practically include all the above enumerated psychical phenomena in mind, which I have taken pains to exclude. And yet, including all such as components of mind, they fall into the same error as our alienists, by accepting as true without question, the assumption that mind is dependent upon cortical cells for its genesis. And if you agree with this, which I regard is an untenable hypothesis, you cannot consistently differ from the statement made by Prof. Stanley Hall, of Clark University, in a published pamphlet on "Anger", wherein he says: "We are sorry because we cry, we are angry because we strike, we are afraid because we tremble." This is materialism run riot, yet every physician who insists upon the genesis of mind, as being dependent upon the cortical cells, is obliged, if he be logical and consistent with his hypothesis, to agree absolutely with this quotation from Prof. Hall. It is such statements as the above which makes psychology, as it is usually taught, difficult of comprehension by the student.

But we hear neurologists and others repeatedly assert that memory is due to the fact that impressions received through the medium of the sensory nerve apparatus, are stored up in the cells of the cortex. They do not know this, they only believe it. Yet they dogmatically repeat it, just as though it were a well-established truth. If this be true, how may they account for the fact that impressions received and stored up in such cells of a youth, are readily recalled by him when he attains the age of 70 years or more, when we know that these cortical cells in the brain, have been by the constructive and destructive changes of metabolism changed time and time again in the lapsed interval of years? And again, if such impressions were stored in the cortical cells, these cells must therefore be considered as the seat of consciousness. And yet we know that conscious-

ness is not dependent upon neural activity alone, as witness the fact of the pupillary reflex, made possible by the anatomical integrity of afferent or sensory nerve, a cortical centre, and an efferent nerve. This contraction of the pupil is not a conscious sequence upon the admission of light upon the retina. If the neural activity of one complete nervous reflex arc, which includes within it a cortical centre, the angular gyrus is unattended by the awakening of the phenomenon known as consciousness; how many such arcs of neural activity are necessary, think you, to awaken it? Let me quote briefly on this point from James Sully, Professor of the philosophy of mind and logic in University College, London, because he states the case so clearly. He says:

"In the process of peripheral stimulation and propagation of its effect to the centre, and in the transmission of a motor impulse from the brain to the muscles, we have a physiological process without any conscious concomitant. How are we to conceive of this partial parallelism? Does it point to any true causal relation between the psychical and the neural factor, or does it rather suggest a parallelism of two disconnected processes, as of two rivers flowing side by side?

"These questions have not been satisfactorily answered by scientific methods. According to a common view, more especially among physiologists, we have to think of the chain of nervous events as complete and self-sufficient throughout. It follows from this supposition, that there can be no causal action of consciousness upon the series of neural events, just because in accordance with the principles of modern physical science, more particularly of the law of the conservation of energy, every phase of a series of movements is fully accounted for by a knowledge of the preceding phases. This view looks upon the appearance of consciousness at a certain point in the physical succession as something collateral and apparently accidental. The doctrine is known as that of Human Automatism, the doctrine that we are essentially nervous machines with a useless appendage of consciousness somehow added. The doctrine obviously fails to explain why consciousness should appear on the scene at all.

"Opposed to this view, we have another which regards the psychical processes as at least as real as the physiological, having a reality which cannot, without setting at naught fundamental distinctions, be subsumed under, or even made subordinate to physical action. This view is naturally the one to which students of psychology have, on the whole, inclined. It concedes that mental events are conditioned by nervous processes in the sense explained above, but it declines to regard the one as in any sense the outcome of the other. Some psychologists go further, and agree that a scientific examination of the facts goes to support the idea that consciousness in its turn stands in a causal relation to nervous action, since its intervention must be supposed to modify the form of the reaction. This efficiency of consciousness is especially maintained in the case of volitional acts."

Consciousness, as we know, is only possible of awakening by the supervention of mental to neural activity. We must not only see an object, but perceive as well, in order that we may be conscious of its presence. Wherein can the faculty of perception differ from the sense of sight, if, as is claimed, it is true that both are dependent upon neural activity? The psychologist distinguishes between seeing and perceiving by regarding sight as a physical process, and perception as a metaphysical process. He considers psychology to be a branch of metaphysics, not a physical science like physiology. He regards the physical and the meta-

physical as being the two sides or realms of a dual universe. Physical and metaphysical are synonyms of material and spiritual. Each of these realms is self-existent. Man is a dual being, at least a type of the universe. Body and soul are the terms we use to designate the physical and metaphysical as relating to man. Each of these is self-existent; each independent of the other. The mind is a series of receptive and emissive processes incident to consciousness intervening between, and serves us as a means by which we have voluntary control over our bodies, that we may utilize our body as a mechanism for manifestation and with which we may accumulate experiences. *Mind and soul are made manifest by the body, but are not dependent thereon for their existence.* Just as, for comparison, the musician makes manifest his knowledge of music by using a piano, but without his knowledge being dependent upon the construction of the piano, or as the falling stone making manifest the force of attraction, but attraction not being genetically dependent upon the stone, so may we comprehend the idea, that a normal brain is necessary for perfect manifestation of intellect and character, but such qualities are not therefore dependent upmust distinguish between manifestation on the brain-cells for their existence. We and genesis, since a difference exists.

Because the commonly accepted hypothesis concerning the relation of mind and brain in the human economy, which regards the one as dependent upon, or induced by the activity of the other, is manifestly incompetent to explain many psychic phenomena, I have discarded it. And because the other hypothesis, unpopular as yet in medical circles because neglected, regarding body and soul as equally self-existent, typical of the duality of universal existence, with the mind as a series of intervening intellectual processes incident to consciousness, is exclusively competent to explain such phenomena, I have accepted it. Furthermore it very satisfactorily accounts for the fact that quite frequently we find gross and minute pathological changes on post-mortem examination of the brains of persons who during life were perfectly sane, and also the fact that no such change can be found in the brains of many persons who during life, were up to the time of death, insane.

If insanity is what is claimed for it, dependent upon cortical disease, how can you account for this very evident contradiction? This explanation has been offered: "There is no insanity without disease of the cortex of the brain. It is only an acknowledgement of our ignorance to speak of functional diseases or inorganic psychoses. The pathological change is there in the cortex, but we do not known how or where to find it." This is just like saying we know there is anthracite coal in Greenland, but we don't know how or where to find it. How do they know the lesion is there, if it cannot be found? They only *think* it is there, they do not *know* it. They think there ought to be some lesion in the cortex, because they believe that mind is functionally dependent upon brain cortex for its genesis. Why not then do away with the term insanity altogether, and regard all such conditions as paranoia, melancholia, mania, and stupor as a form of brain disease, not mental?

If in our study of psychiatry we had approached the subject in a rational manner similar to that which I have endeavored to outline above—study the normal mind, not the brain only, the disease afterward —we should not now entertain the erroneous idea that mental disease is dependent upon impaired cortical integrity.

It has been said of me that had I ever had any clinical experience in an asylum I would not make any such statement as the above implies. Let me ask how many

cases of insanity must one see clinically to determine the question of the relation between mind and brain? Can such a question be determined by clinical study? No, I answer, not if one should see a million cases. How many cases of typhoid fever should be studied clinically to determine the fact that it is caused by the Bacillus Typhosis? We, as a profession, have been studying small-pox clinically for centuries and do not yet know its etiology. Such questions cannot be determined by clinical study alone. We require the aid of the microscope and laboratory methods to determine such points. Since this is true of the study of disease in the physical body, that clinical study alone is insufficient, to determine all disputed questions of etiology and the nature of disease, is it not equally true of that much more difficult subject, mental disease? We have brain disease without insanity, and insanity without brain disease. They are entirely independent, one of the other. Delirium is not insanity.

Our microscopists are quite as competent to determine the presence or absence of organic disease in the brain cortex, as they are to determine the same thing of the kidney. We accept their findings as final in the case of the kidney, but because they find no anatomical changes in the brain of a person who, during life, suffered from mental disease, we practically accuse them of incompetency. The error is our own, in that we expect to find such lesion, because we yet entertain the false hypothesis as true, that insanity is due to cortical disease.

The sooner we come to look upon man as being something more than a physical body, and begin to study psychology in addition to anatomy and physiology, the sooner shall we solve many problems as to mental disease, now incomprehensible to us. We cannot account for consciousness on a physiological basis alone, we must seek further for an explanation of the phenomenon. I commend to your thoughtful consideration a careful study of psychology. It is not a speculative science, as many who are incompetent to pass judgment upon it claim it to be. To deny the self-existence of the metaphysical, because it is undemonstrable to our senses is to display no small degree of blissful ignorance.

I therefore plead the student's cause when I affirm that he should be permitted during the early years of his college course, to study the normal mind, preparatory to his study of psychiatry in the final years of his medical course. The fact that it is not being done, is no argument against its propriety. We live in an age of progress. A short time ago, bacteriology was not being taught, and we who did not enjoy the privilege of such instruction are the losers. Just what the study of bacteriology is to a knowledge of septic processes, or anatomy to surgery, physiology to practice, psychology is to psychiatry. The study of psychology is proper for medical students: 1. Because present methods of teaching psychiatry are inadequate to meet the demands made upon the physician. 2. By the study of psychology alone may we understand what the mind is. 3. The study of psychology is conducive to mental culture. 4. It is essential to the student in order that he may comprehend psychiatry.

497 Trumbull Avenue.

Not Too Old To Practice.—The oldest practicing physician in the United States is said to be Dr. O. R. Skinner, of Freehold, N. J., who is in his 93rd year. He was a surgeon in the late civil war. He is kept busy with his professional duties and answers promptly all calls.

Nitro-Glycerine for Post Partum Hemorrhage.—"Nitro-Glycerine has a wonderful effect in post partum hemorrhage," says the *Medical Summary.*

SOME ADVANCEMENTS IN RADIO-THERAPY.*

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Probably no discovery since that of Serum-therapy has attracted so much attention as the discovery of the effect of the X-ray upon some diseases heretofore considered incurable.

The first announcements of the great benefits derived from this unknown, mysterious agent were received with discredit by the doubting, skeptical minds of the profession at large; this was not to be wondered at, so marvelous are its results with diseases, formerly classed among incurable ones.

For instance, cancer has caused the death of seventy-five per cent. of its victims. Lupus also, has been unresponsive to medical skill. Therefore, when we read in some of our best journals, that these two diseases were influenced by the X-light, with reports of cases cured, it is not strange that to all of us the news seemed too good to be true; for we had looked on the X-ray as merely an assistant in diagnosis.

We know from experiments with plant life that the electric arc light has nearly the same vital stimulating influence as the sun's rays. Siemens found that plants exposed to the sun's rays six hours, and six hours to electric light, far surpassed those in darkness, or under ordinary conditions. Plants were more vigorous and the flavor of fruit from plants thus treated was unsurpassed. The chemical or actinic ray of the sun, causing erythema or sunburn, produces the same action as the arc light, except that it results more quickly with the electric light, but no sensation of a burn, as with the sun's rays, until days after the effect is produced, because of the absence of the red, or heat ray; showing the same stimulating influence upon the skin.

As a therapeutic agent, we have had our attention forcibly attracted to the X-ray, for about two years. The first year was productive of but few results because of the great fear of the damaging properties the Ray posesses. Few men cared to risk their reputations, perhaps, to say nothing of the expense of equipping themselves with what might prove only an experiment. For there was no literature to assist them, and almost daily came reports of very destructive burns occurring during exposures for radiographs. However, during the past year, operators have placed this form of treatment beyond the experimental stage, and it now occupies a field in therapeutics, covered by no other known agent. Today, the best men in the profession, no longer sit back and smile at the enthusiast, but if they have not a means of this method of treatment, they have cases that are being so treated, under constant observance.

The lay public are rapidly collecting the erroneous idea that the Rays are a deliverance from the knife. This, you can readily see the harm in; for in deep-seated carcinomata, where there is a large tumor, the Rays can do but little toward a cure; but in some superficial growths, the results are like magic. However, every week, the conscientious operator of the Ray must advise patients to return to the surgeon for entire extirpation of the growth, if operable, to be followed by the Rays when the wound heals, thus securing perfect healing and destroying any pathological foci beyond the reach of the surgeon's knife.

Therefore, while the results obtained with the Rays have justified the time and expense of the treatments, and could be obtained by no other treatment known, to date, yet I do not by any means regard

*Written for the Detroit Medical Journal.

it as the only method to use, to the exclusion of excision or other long-tried and successful ones. We are still in total darkness as to the true nature of the X-ray, the prefix X, signifying "unknown". The work done with it to date, has been almost entirely experimental. We have been feeling our way along, as it were, making careful clinical observations, with now and then a bad dream of a sloughing burn. Though the oftener I use the Ray, the greater respect I have for its damaging and destructive properties.

There can be no definite, universal rule in applying the rays, in different classes of disease; or in patients with the same disease, for no two cases react the same, with practically the same ray. Every case is at the mercy of the operator, who should always begin exposures of short duration, should examine the parts exposed, before and after every treatment, note the first stimulating symptom, erythema. Blondes react more quickly than brunettes, old people more quickly than the middle-aged, or young, and are much more liable to burn. Because of less cell-resistance, tissues near the bone react more rapidly than tissue having fat underlying them.

Its action upon all cell tissue, histological or pathological, is a powerful stimulant. The epithelial layer of the skin shows marked stimulation, and to this rapid cell proliferation is due the filling up of what, with any other treatment, would be an ugly scar, in ulcerated lesions, and when healed but little, if any, pit or scar is seen.

Upon the true skin, the same cell stimulation takes place in all different cell-structures. The nerve-cell is the first to show stimulation, and soon, overstimulation, producing an analgesic effect. Relief from pain is a most constant expression after but fewer radiations.

Dr. Morton, of New York, reports a case of tic douloureux entirely relieved by irradiation of the Gasserian ganglion, that had been twice operated upon, to remove the nerve. Irradiation of Locomotor Ataxia cases has given relief from pain and cessation of vomiting, etc. Also, with promising symptoms in Paresis, more stimulation was produced than by electric treatment.

The blood supply is increased; phagocytosis more active. Nearly the same, if not identical, are the changes that take place in the circulation I have observed, in the frog and tadpole with this irradiated inflammation as occur in a normal inflammation. All glandular functions are stimulated, so that the most obstinate acne indurata is entirely relieved. Superficial ulcerating lesions, such as lupus, epithelioma and chronic varicose ulcers heal rapidly, and inoperable lymphatic glandular enlargements have been entirely reduced.

Stimulation of the hair-bulb also takes place with rapid growth, then over-stimulation, atrophy of bulb, and finally falling out of the hair. Such stimulation will carry away old scar tissue.

Not all the good effect upon the deforming skin lesions, and growth is due to cell-stimulation. Many such affections are due to micro-organisms and on them the rays have a truly hampering effect; either in direct chemical, antiseptic action, which means death, or a stimulation to over-growth, attenuation, and death.

Deeper tissues, both soft and hard, are affected the same as superficial structures. New bone deposits, as osteo-sarcoma and enlarged tubercular joints can be partially carried away, and in some cases, entirely so.

Yet I believe with this great, all-exciter it is possible to stimulate the pathological cell to a more rapid growth than with a cell to a more rapid growth with a mild ray, and I still maintain that in some cases, the ray must be pushed to the burning point, for then we are sure of over-

stimulation of the pathological cell which has less resistance than the normal cell; this means death to the cell with the least resistance, and a stimulation of the normal cell to its utmost; then, and then only, shall we see improvement in malignant growths, and others of a like nature. It is just in this particular that the timid operator will not reap the results looked for.

Just here, let me emphasize the importance of administering enough of the rays to cause chemical retrogression of the pathological condition and not destroy normal tissue, if a result is to be obtained.

The symptoms of stimulation, to the desired degree, or to the retrogression of the pathological cell, are Erythema and Dermatitis.

When this physiological, stimulating effect is produced, the waxy edge of the epithelioma can be seen being rapidly carried away from day to day. The same is true in Keloid deposits, tubercular enlargements, and osteo-sarcomatous tumors. It is extremely important that the operator produce this stimulating effect gradually, and that he continue the effect without over-stimulation, and destruction of new tissue or atrophy of normal tissue. This characteristic, stimulating condition once produced, may spread for a week, and continue two weeks, involving areas far remote from the exposed parts, and if the lesion is local and superficial, treatment may be stopped, and when inflammation subsides, the lesion will be much improved, if not entirely healed. If it be a malignant, deep-seated growth, softening, and diminution in size will be apparent. If an open ulcer is being treated, there will be less discharge, absence of odor, relief from pain, but not a result unless the physiological effect is obtained. In grave, inoperable, malignant conditions, where most active stimulation must be continually kept up, by protection of your areas of Dermatitis, with tin-foil or sheet lead, different areas of the growth, at different angles, may be exposed. I have cases that have been with me for from three to six months, that have peeled from four to twelve times, yet lose only now and then one of continuous, daily exposures, with but little, if any, injury to or destruction of normal tissue.

This inflammation, produced gradually by the rays, does not cause pain. But if pain existed before exposure, it is the exception to a most constant rule if the pain is not relieved with from one to three exposures. Yet if an extensive rapid reaction is produced, great pain will result as in an extensive, deep-seated inflammation from any other cause.

In the cell-structures, in some malignant growths, with irradiation marked changes take place. In grave, operative cases, where the Rays have been given for weeks, or even months previous to the operation, while the treatment is unknown to pathology, pathologists report upon specimens, which are different from anything they have ever seen. Degeneration of the cancer cell was apparent, and also a change resembling repair, in the edges of the growth.

In no way do I wish to convey the impression that the ray is a cure-all in malignant conditions. While we have, as far as can be determined, a complete removal of the growth, yet some cases will show only a checking of the growth, for a time, and relief of pain; then suddenly, it will grow as rapidly as before, the ray seeming to have lost effect even though an increase in time of exposure be given. At no time have I allowed the rays to offer a substitute where the patient would submit to a complete removal by the surgeon.

I believe in the application of the rays after every operation for the removal of malignant conditions, for it can do no

harm, and it does assist in the stimulation of normal repair.

I believe we are on the eve of a revolution in the treatment of many skin-deforming affections; and the Ray treatment may assist the pathologist into some yet obscure field of research as to the true cause of cancer.

In conclusion, let us note what is accomplished by the Rays:

First: Relieves pain.

Second: Diminishes new growths.

Third: Hampers all germ life.

Fourth: Assists in disappearance of odor and discharge.

Fifth: Excites a normal process of repair in all cell-structures.

Sixth: Little or no scarring.

Seventh: A most valuable therapeutic agent when properly used after operations in malignant conditions.

Eighth: Changes in character of growth pathologically to less malignant.

Dangers and uncertainties:

First: Possibilities of burns and gangrene. Pigmentation and falling of hair.

Second: Indefinite dosage.

Third: No universal technique.

Fourth: Difficulty in ascertaining the danger point in overstimulation.

Fifth: Diseases pathologically similar, do not react the same.

Sixth: Possibility of mild or fatal toxemia.

Seventh: Possibility of stimulating pathological conditions to a more rapid growth, if not enough of Ray is given.

420 Woodward Avenue.

For Gastric Ulcer.—The *Medical Sentinel* recommends the following:

℞ Picrotoxin.
Morph hydrochl, aa gr. i.
Atrop sulphat, gr. 1-5.
Ergotin, m. xx.
Aq. Laurocerosi, ℥ iij.

M. Sig. Four to six drops five to ten minutes before each meal.

Right From the Heart.—A layman, a sufferer from an attack of malaria which now is as rife in Massachusetts as Michigan, between rigors gave birth to the following:

OF A BIRD, A BEAST, AND A TREE.
(The story of a Sanguinary Contest.)

Of all that lawless, pirate band
That sails the seas or scouts the land,
To stab, to dynamite, to slay,
To poison, torture, or betray,
Like Filipino or Malay,
The foe I dread most shuns the day—
Anopheles Mosquito!

He is no common orator,
An agitator, striker, or
Some one whose head is turned a bit,—
Although he SPEAKS when you permit,
And AGITATES, and STRIKES with grit,
For blood and LONG hours—think of it!—
Anopheles Mosquito.

He is a leader sharp and wise,
Well-stocked with bountiful supplies.
He brings his troopers without drum
Or any sound save low-pitched hum,
And carries them himself, I vum!—
The warlike, fierce Plasmodium,
Plasmodium Malariae.

He makes a breach with his sharp sword:
His sturdy warriors, in a horde,
Swarm in and quickly work their will;
Each corpuscle of blood they fill,
But when they go abroad, they thrill
A body with a fearsome chill,
Plasmodium Malariae.

You fear they'll be the death of you,
And then you fear they won't, 'tis true.
For when their camp-fires start to burn,
Upon your bed you toss and turn,
All food you loathe, companions spurn,
WAS THIS PLAGUE IN PANDORA'S URN,
Plasmodium Malariae?

It's sad that Culex, slight and thin,
Should be mixed up with his bad kin,
Shame-faced, head-down Anopheles,
Who smites by night to burn or freeze,
And kills his foes by slow degrees,
While they give sustenance to these
Plasmodia Amoebae!

'Tis well Jove saw Pandora's box,
And knew she'd tampered with the locks.
That good friend of our human race,
With wisdom and with kingly grace
Had planted in the proper place
A weapon that would save the case—
Cinchona, O Cinchona.

We've fought our way up from the gulf
By that loud-ringing blade, "Quin. Sulph."
And now are we to sit here dumb,
And let Anopheles "go hum?"
NO! FIGHT HIM WITH PETROLEUM!
Purveyor of Plasmodium,
Anopheles Mosquito.

L'ENVOI.

To me will come AN AWFUL EASE
When thou art gone, Anopheles!
My PLASM freed from ODIUM,
When thou art dead. PLASMODIUM!

—(A. W. Hitchcock, Worcester, Mass., Nov., 1902.)

DETROIT MEDICAL JOURNAL

A CONCISE MONTHLY
EPITOME OF PRACTICE AND THERAPEUTICS.

WALTER C. BOYNTON, Manager.

—ISSUED BY—

THE DETROIT MEDICAL JOURNAL CO.,

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DETROIT, MICH., DECEMBER, 1902.

THE SEASON'S GREETINGS.

For the second time since we began publication, we are privileged to extend the greetings of the season to our readers. It is with even greater pleasure this year that we avail ourselves of the privilege than we did a year ago, for last year we were practically able to lisp them only. Since that time we have improved—our friends tell us so, and with all due modesty we have noted an inprovement, ourselves. The Journal is better now than it was a year ago, and we are not ashamed to say so. We are publishing more original matter, the departments have assumed more importance, and in the words of Kipling, we have "found" ourselves.

From both our literary and our business friends we are receiving more hearty support and we are assured of the continuance of support from all sides. These are pleasant assurances, and we shall see to it that all who have been so kind as to make us promises are reminded of them from time to time. More people are reading the Journal every month and more are paying their subscriptions when they are due. Some of our subscribers do not yet realize that it takes money to run a publication, but we are trying to have patience, knowing that some day our backward friends will settle the small bills we have against them.

So, with many thanks to our supporters, subscribers, contributors and advertisers, we extend an old-fashioned but a very sincere wish that they may enjoy a Merry Christmas and a Happy New Year.

BENEFACTORS IN DISGUISE.

An interesting development in the exact science of advertising, as it is practiced by enterprising American business houses is furnished in the evolution of the testimonial letter. Readers of the advertising space in the daily newspapers for generations have been accustomed to see the faces of well known men and women looking out—somewhat dimly—from the wood-cuts and the old line-drawings surmounting an "unsolicited" testimonial of some patented preparation or drug nostrum. The majority of these preparations have failed of hearty endorsement at the hands of the medical profession, but now we are approaching a change in affairs. The members of the profession have been enlisted in the ranks of the "puffers" of proprietary preparations, and the methods of proprietor and endorser have assumed startling proportions.

Our medical journals for months have been filled with contributions whose thinly-veiled purpose has been to boom some pharmaceutical preparation. This is a perversion of the sometimes valuable clinical report, and like most perversions is disagreeable to witness. Every editor is accustomed to receive contributions, sometimes typewritten, sometimes in long-hand, describing either some general treatment or some specific case treated by the physician who has written it. Somewhere in the body of the article, put in almost by inadvertence, is the name of some more or less well known preparation, the use of which is advocated by the writer of the article handed in. One has to be constantly on guard against publishing these things. The natural supposition of every editor, when he gets one of the first of this class of hack articles is

that the contribution is prepared for his readers alone; the fact is that the same article has been duplicated and sent to almost every journal of medicine throughout the country. One in particular that was received by us ran through more than twenty journals (not this one), and the end is not yet.

The plan is poor. It hurts the manufacturer with the journals that would be glad to assist a worthy preparation through legitimate advertising; it is bad for the journal, the readers of which lose respect for it; and it is trebly bad for the hack writer, who loses caste with the publisher, the reader and the manufacturer. Once a man has lent his name to this sort of thing for the money he receives (and we can scarcely believe that in any case a writer of this class is actuated by purely humanitarian motives) he must be barred from further contributions to any journal in good standing. His professional brothers must have at least a mild contempt for him and the manufacturer knows that an opinion which is for sale is never worth the genuine unsolicited endorsement that is based only on the merit of the preparation which is endorsed and not on the size of the check which the manufacturer writes for syndicated articles.

The plan is self-limited. The time must come when the profession, the members of which make up the readers of medical journals, will hesitate to believe and will finally refuse to place any credence in the statements of men who write of the benefits derived from the use of such and such a preparation. The preparation itself will lose prestige because its manufacturers have been obliged to take a doubtful means of placing its merits before the physician, upon whose support they must depend to a large extent for a sale of their goods. The time must come when the editors can be no longer fooled in this fashion; and when that time comes, the hack writers will have done a great service to medical writing. They will have made it impossible for anything not strictly in accord with profession-etiquette to gain a place in any medical publication with pretensions to a high standard. Their contributions will be relegated to the columns of those journals that frankly acknowledge that the sole excuse for their existence is a desire on the part of the publisher to make the paper pay. In this way such writers as we have described are in reality benefactors in disguise. The counterfeit presentiment is well gotten up, the disguise hard to penetrate, but a little education on the part of the editors and the reading members of the profession will cause the mask to fall and the dark Providence of this abuse of legitimate journalism to become apparent.

THE ANTI-CONSUMPTION LEAGUE OF TORONTO.

In the November issue of the Journal, we called attention to a proposition introduced in the meeting of the medical society of West Virginia by Dr. G. A. Aschman, of that state, to the effect that the physicians of the southern commonwealth band together in an organization to secure legislation looking to the establishment of a sanatorium for consumptives which should be the result of laws enacted by the state legislature. A recent letter from Dr. E. J. Barrick, of Toronto, Ontario, calls our attention to the fact that there is an anti-consumption league in the Canadian city which is working along the same lines. Dr. Barrick is president of the league in question, and is naturally deeply interested in the subject.

Considerable progress has already been made by the Toronto organization. It has succeeded in securing the passage of an enabling act, on the part of the legislative assembly of the province of Ontorio, by which any municipality may establish

a sanatorium for the treatment of consumptives. In every case in which a municipality takes action in this direction, the plans are to be submitted to the Provincial Secretary, who is to submit them to the Board of Health for report. Upon receiving this, he may approve the plans, making, however, such changes and modifications as he may think best. In this manner the sanatorium, when established, is to have all the advantages of government endorsement and support. The council of the municipality itself, however, must take the real initiative. The council is permitted to pass by-laws for raising the money which the municipality is to contribute to the cost of the proposed sanatorium. In Toronto, last month, the Board of Control recommended that a by-law to provide for an issue of $50.000 in debentures should be submitted; the committee of the whole defeated this recommendation, but it was reinstated in the Council by a vote of 10 to 7. This is an important step towards the accomplishment of the wishes of Toronto members of the league.

The Toronto act provides that a board of trustees shall be provided for in the municipal by-law submitted, they to take charge of and manage the sanatorium, in the form of a corporation. The real control, however, is to be vested in the Lieutenant-Governor, since he is given power by the act to make regulations concerning the management of sanatoria which shall supersede any regulations made by the trustees, provided that the latter are at variance with those of the Lieutenant-Governor. This official is also given authority to pay over to the trustees one-fifth of the cost of the sanatorium, its equipment and running expenses, provided that the grant so made (from the consolidated revenues of the province) shall not exceed $4,000 in all. He may also, out of any money voted by the Legislature for the purpose, pay to the trustees a sum of money not exceeding $1.50 per week for the support of patients undergoing treatment at the institution. The properties acquired for a sanatorium and vested in the trustees are to be exempt from taxation and donations are permitted. Municipal aid, to the extent of $2.80 per week for each poor patient, is figured on in Toronto.

All this points to a future of governmental activity in the matter of caring for tuberculous patients, with the idea of lessening the ravages of the disease. How necessary some action was in Canada is shown by some statistics given for the province of Ontario by the Registrar-General for the year 1899, which state that tuberculosis resulted in 3,405 deaths in that year, with 3,291 in 1898. It is figured that no less than 9,000 people die of the disease in the Dominion every year and that in Toronto alone half a thousand deaths result from it annually.

The league points out the fact that strong endorsements of the government sanatoria idea have been received from high sources and the members are now steadily at work on an effort to raise sufficient money to supplement the necessarily small grant from the authorities. The plans for the sanatorium include an administration building, cottages and tents for the patients and a tract of land between 50 and 100 acres in extent. It is planned to establish the institution within twelve miles of Toronto, and one of the requisites for admission shall be two years' bona fide residence in Toronto previous to receiving the benefits of treatment. The league plans to make it a rule that neither poverty nor any stage of disease, however advanced, shall be a bar to admission. Nor is it planned to make the institution eleemosynary. Patients who can pay are to do so, in proportion to their means, and only the very poor will receive free treatment. The establishment of the institution is regarded as an

investment on the part of the municipality and the other contributors to the establishment of the sanatorium, returns payable in increased health among the citizens of the province and in the actual monetary saving effected through the fact that in years to come the government will not be called upon to support those who are helpless as the result of systems enfeebled by consumption in their forbears.

If, as it is hoped, the Toronto sanatorium proves the opening wedge of a series of similar institutions all over the Dominion, perhaps the time is not too far distant when the "great white plague" may be entirely stamped out. And this is, undoubtedly, a "consummation most devoutly to be wished".

EDITORIAL NOTES

Interest in tuberculosis is on the increase all over the country. One of the more recent signs of this is the establishment of a course of free lectures by the committee on the prevention of tuberculosis in New York. Lectures will be delivered every month in the hall of the United Charities building and a number of medical authorities will have a place on the programme. Dr. J. H. Huddlestone has already spoken on the subject and the list of speakers to come includes Drs. Biggs, Janeway, Jacobi, Bryant and others. The lectures already given in various parts of the city have proved of great benefit, particularly in the thickly-settled districts of the city.

The Germans are certainly great excavators and archaeologists. The *Lancet* reports that Dr. Rudolph Herzog has discovered the temple of Aesculapius, for which search has been so long continued. The site of the temple is beneath an old Byzantine church on the island of Cos, in the Aegean Sea, where Hippocrates was born and where the Aesculapian doctrines were taught. The temple contains among other things a statue of Hygeia and an image of a serpent, symbol of healing. Germany has apparently scored again.

Popular subscriptions will be one of the bases for raising money for the support of the New York Post-Graduate Hospital, and residents of the east side of the city, where much of the good work of the hospital association has been done, will be relied upon to raise a large sum of money, in sums of $1.00 from each. Subscriptions in larger amounts will also be solicited, and it is announced that four persons have promised to give $25.000 each if the association will raise the sum of $100,000. The hospital has been run at a loss for some time past, and in view of the increased demand for its services the money is necessary.

Prof. Adolph Lorenz, the Vienna surgeon who recently made a visit to Chicago to perform his operation for the reduction of congenital dislocation of the hip on little Lola Armour, has been made a Doctor of Laws (honorary) by Northwestern University. The degree was conferred on Dr. Lorenz on November 28 and the attendant ceremonies were witnessed by the trustees of the college, the members of the faculty and several hundred guests.

It is proposed to revive the Victorian Order of Nurses in Halifax, where the branch of the order established by the Countess of Aberdeen died a few years ago. The physicians who practice among the poorer classes in the neighborhood feel the lack of nurses and the branch of the honorable order will be put on its feet again by a number of philanthropic ladies of Halifax.

A writer in the *Pennsylvania Medical Journal* hits the Christian Science business fairly, when he sums up their belief as follows: "Matter has no existence. Our bodies are composed of matter. Therefore, our bodies have no existence. Hence, it is conclusive that disease cannot exist in a non-existent body." He then goes on to say: "That this is the correct theory of so-called Christian Science no one can deny who reads the works of its founder. And it does seem as though no serious argument was required to convince any person, of reasonable intelligence, that the Christian Science philosophy is nothing more than a self-evident absurdity."

Pneumonia formed the subject for discussion at the meeting of the Wayne County Medical Society, held on the fourth of the month at the Hotel Normandie. The programme of papers was as follows: "Pneumonia in Childhood", Dr. A. D. Holmes; Pneumonia in Adults", Dr. E. A. Chapoton; "Complications and Sequelae", Dr. S. G. Miner. The discussion was opened by Dr. Charles Douglas, Dr. W. R. Chittick, Dr. J. J. Mulheron and Dr. Willard Cheney.

What quarantined people expect to receive from the city health department in Detroit is demonstrated by the following requisition, made on the health officer recently: "Five lofs of bread Pound of coffee two pounds of poder house stake too Pounds pork Chops one Chicken twoo Dozen Cakes twoo pound of Shuger pound of Sault two bars of sope one boxe of matches galen oil tree Smoke Fiche pound of Cream Chies two pounds of ote miel helf pound of tea one pound of butter dozen of egg pounds of pruens."

The old Bellevue Medical College building is undergoing a process of transformation. The four walls, which have been in position for more than forty years, will be left, but the whole inside is to be changed. The dispensary will be placed on the first floor, the second floor will be the lecture hall for nurses and the third and the fourth floor will be made into a dormitory, where the 150 employes of the hospital will be taken care of.

An Italian has compiled statistics which show the evils of marriage among the insane. His report states that 889 families have contributed 1,958 inmates to thirty-two of the Italian asylums. Among them are 1,058 groups of relatives —10 of grandparents and grandchildren, 257 of parents and children, 488 of brothers and sisters, 153 of uncles and aunts and nephews and nieces and 150 of cousins.

Considerable satisfaction is expressed in medical circles over the appointment of Johannes Orth, professor of pathological anatomy in the University of Göttingen, to succeed the late Rudolph Virchow in the chair of pathological anatomy in the University of Berlin. Professor Orth was Virchow's assistant for a number of years and is naturally thoroughly familiar with the ideas and methods of his chief.

New York is afraid of a general visitation of trachoma. Nearly 15,000 school children have been taken from school by order of the health authorities and the city finds itself at a loss to know what to do to check the spread of the disease, which it is feared will assume large proportions.

The *Philadelphia Medical Journal* conducts a laboratory for the purpose of furnishing physicians with reports on treatment which shall be of practical value to physicians. The first contribution from Dr. Henry Leffman, director of the laboratory, is a report on the commercial form of hydrogen dioxide.

New Instruments & Devices

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

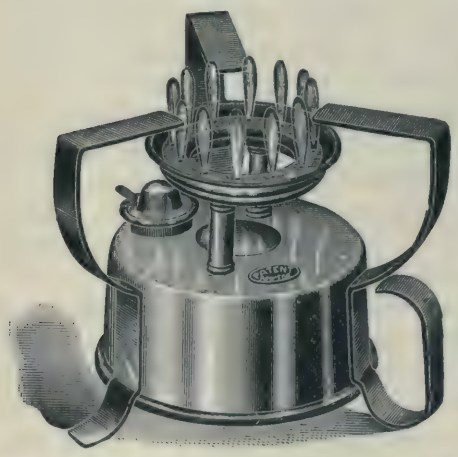
We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eighths inches should be sent.

Always mention the price of the article in question.

The management cannot undertake to return cuts unless postage for same accompanies the letter with which they are sent.

GLOGAU ALCOHOL-GAS STOVE.

For convenience, lightness and cheapness, this is one of the best stoves we have seen. It weighs only half a pound, yet it holds seven ounces of alcohol and



will support a vessel that weighs 100 pounds. It is claimed by the manufacturers that it burns as steadily as a gas-stove, without smoke or odor, and that the wick does not have to be renewed from time to time. Either wood or grain alcohol may be used to generate the gas and the construction of the stove is such that it may be upset without spilling the alcohol or causing an explosion. An idea of the rapidity with which heat is generated, and the intensity it develops may be gained from the statement that it boils a quart of water in twelve minutes. Physicians who have no gas in their offices will find the little stove convenient for sterilizing their instruments and for getting hot water speedily and at a small cost; in fact the uses to which it may be put are almost numberless. A great advantage which the stove possesses, one which will probably prove popular with the profession, is its price. It costs $1.00 and this price covers carriage.

INVALID'S RUBBER RING.

The manufacturers call this device the "solid comfort" ring and indeed it is a boon to the weary patient who gets so tired of sitting up, but is better up than

in bed. Rubber rings for invalids are by no means new, but there are some features about this one that makes it unusually attractive. Its oval centre allows it to conform well to the shape of the user's body, while at the same time it admits of free ventilation, and the manufacturers claim that upward pressure in front or back is prevented also. It is a new thing, and physicians who have patients that need something to make them sit more easily would do well to get one. Or, the busy practitioner might well get

one for his own use, to sit on in his few moments of idleness. Slate rubber is the material of which the ring is made, and it comes in three sizes. Possibly the most popular one will be the medium size, 15 inches in diameter, which retails for $3.00.

ROENTGEN X-RAY TUBES, WITH REGENERATING ATTACHMENT.

Chemical regulators for X-ray tubes have been in use for some time and their use has been fairly successful in maintaining the vacuum; the difficulty has been that when the vacuum has once become high after the use of chemicals a stronger discharge is always necessary to start the tube to working. The tube illustrated herewith has a regenerator by which the vacuum may be lowered to the requisite degree, without having it rise after the tube has been used.

The means employed takes advantage of the faculty of certain platinum alloys to absorb hydrogen, when at a red heat; and the device consists of a small tube of palladium, closed at one end and the other open end fused into the cathode neck of the X-ray tube. The palladium tube is covered with a removable glass tube and when it is desired to lower the vacuum the latter is taken off and the exposed tube of palladium is heated blood red in the flame of an alcohol lamp or a Bunsen burner. Care must be taken not to let the flame touch the glass and not to heat the tube too near the glass. Old tubes may have their vacua repeatedly reduced in this manner, and they should be permitted to cool for at least 15 minutes after being used and regenerated.

THERAPEUTIC BREVITIES

Loctophosphate of Calcium in Scrofulosis.—Hare, writing in the *Journal of the American Medical Association,* suggests:

℞ Syr. ferri iodidi, ʒ j.
Ol. morrhuae.
Syr. calcii lactophos., aa ʒ j.
Aq. calcis, q. s. ad ʒ iv.

M. Sig. Shake well and take from two to three teaspoonfuls after each meal.

Pruritus Ointment.—An exchange says to try:

℞ Mentholi, ʒ j,
Cerat. simp., ʒ ij.
Ol. amygdal dulcis, ʒ j.
Ac. carbolici, ʒ j.
Pulv. zinci oxidi, ʒ ij.

M. Sig. Apply morning, noon and night, after cleaning the parts.

Cough in Phthisis.—Doctor, try this prescription, says the *Medical Record*:

℞ Codein, gr. 1½.
Terpin. hydrat., gr. 15.
Ext. hyoscyami, gr. 1½.
Ext. belladonnae, gr. ¾.
Mas. cyroglossi, gr. 7½.

M. Ft. pil. No. x. Sig. One four times

Sweet Gratitude.—

"Thank God for the doctor," the layman cried,
As he watched him with bated breath
And saw the physician with skillful touch
Saved the one that he loved from death.
"Thank God for the doctor," he humbly moaned
"Every hour of my life I owe,
To him who has saved us this life to-day;
Saved the home from its grief and woe."
There were honest tears in the layman's eyes
As he held in a vise-like grip,
The doctor's hand that was thin and cold,
And pressed it with fervent lip.

* * *

What a lovely thing is this gratitude!
How sweet the reward we gain!
For the labor we do for the sick and weak;
Our labor of hand and brain!
What a wealth we have for our daily work
For those who are sad and ill,
How sweet to the ear is the grateful word
Until we present the bill!
Oh, wise was the man who of Old Nick wrote
"When sick quite a monk he'd be,"
But gaining his health—what a truth it was—
That "devil a monk was he."

NOTES & COMMENT

Virchow Monument Subscriptions.—The German Committee in charge of the celebration in honor of Rudolph Virchow's eightieth birthday, Prof. Waldeyer, Chairman, Prof. Posner, Sec., has begun colecting funds for the purpose of erecting a monument in memory of that great and unique man and physician. The undersigned are anxious and ready to receive contributions, which will be duly acknowledged: Frank Billings, President of the American Medical Association, 100 State St., Chicago, Ill.; Thomas D. Coleman, 505 Green St., Augusta, Ga.; A. Jacobi, 19 East Forty-seventh St., New York City; W. W. Keen, President of the Congress of American Physicians and surgeons, 1729 Chestnut St., Philadelphia, Pa.; Wm. H. Welch, 935 St. Paul St., Baltimore, Md.

Faithful to His Employer.—The *Washington Star* publishes a good story on Senator Gallinger, of New Hampshire, who was for a number of years a practicing physician. When he was active in his profession, he visited a patient who lived next door to a house in which a death had just occurred. There was crape on the door and a curious passer-by, seeing the sombre sign, asked the coachman of Dr. Gallinger, who was waiting with his horse for the doctor to come out, who it was that had just died. The coachman's reply was a characteristic one. "I don't know", said he. "It's not of our killin'—it's not of our killin'." Then he drove his horse directly in front of the house where Dr. Gallinger was attending a patient who was to recover.

How We Are Liked.—

Woodstock, Ky., Nov. 10th, 1902.

DETROIT MEDICAL JOURNAL,

Detroit, Michigan.

I have received the last three numbers of your invaluable JOURNAL and send enclosed 25 cents for same. I am ceasing to read. This is from age, ill health and blindness. I get my son, who lives ten miles away, to read the DETROIT MEDICAL JOURNAL for me and I like it very much. I think it is well worth double the price and if I could read I would continue it.

Yours truly,

(Signed) W. H. Bentley, M. D.

A Continuous Performance.—An unbroken record of success attests the high state of perfection to which the Oldsmobile has attained. Two blue ribbons in the Chicago Endurance Run, first against the crack French and American racers in the two five mile events at St. Louis, and the remarkable record of being the only machine in its class to complete the course without a penalized stop in the New York-Boston Reliability Run are emphasized by the winning of three cups for first places in one afternoon at the meet under the auspices of the Chicago Automobile Club.

Everything necessary for speed, endurance and reliability is found in the Oldsmobile and the fact that there are no unneccessary attachments gives this popular little runabout the immense advantage of simplicity over its more ponderous and cumbersome competitors.

In addition to the first cost of the Oldsmobile being extremely low, its practical and simple construction does away with the dependence of the owner on the repair shop and verifies the statement of the Olds Motor Works that this Automobile is "built to run *and does it.*"

Re Local Anæsthesia.—W. C. Woods, of Brooklyn, makes the following suggestions in the *Medical News*:

1. To produce skin anæsthesia, intradermal and not hypo-dermal infiltration is necessary.

2. Intra-neural or para-neural infiltration in the trunk of a nerve is equivalent to complete section of the nerve as far as sensory impulses are concerned.

3. Elastic construction prolongs the anæsthesia.

4. Proper infiltration permits the use of very dilute and non-poisonous solutions, for pressure on the nerve ends will alone produce numbness.

5. All tissues and organs of the body except the skin and nerves, when inflamed, have little or no sensation.

6. Morphine should be used systematically as a preliminary to all local anæsthesia to lessen the psychic pain.

7. Local anæsthesia can be supplemented when necessary by chloroform or ether for a brief period in certain steps of an operation with less danger than if the general anæsthesia was given continuously.

Eat To Live.—*Good Health* asks: Do we eat too often? Among most civilized people it is the usual custom to eat three, four or five times a day while in England one occasionally meets people who regularly eat six times a day. The ancient Greeks, according to Pythagoras, ate but once a day. But his recommendation of the plan of eating twice a day was adopted, and on a diet of simple foods, consisting chiefly of wheat figs and a few vegetables, that country produced the finest race of men the world has ever seen.

Good for Chicago.—A hospital with suites for guests and sumptuous wards for patients is soon to be erected in Chicago, at a cost of $400,000, exclusive of land, furnishings and equipment. The hospital will be known as the Shore Inn, and will be 11 stories high. Eighty of Chicago's leading physicians have each subscribed for $5,000 worth of stock. This will be a hospital where a patient who considers his comfort of most importance can bring his family or friends and install them in luxurious suites in the building where he is being treated. —(*Philadelphia Medical Journal.*)

Those Careful Parisians.—A young Parisian woman, who recently became engaged to be married, on applying for her official papers, discovered that a mistake as to her sex had been made, and she had been put down on the register as a boy. She also discovered that the police, believing her to be a boy, had a warrant for her arrest for not presenting herself for military service. She will now have to prove her identity, and, in the meantime, the marriage has been postponed indefinitely.—(*Philadelphia Medical Journal.*)

Hawaiian Physicians.—It has been announced that all physicians now practicing medicine in the Hawaiian Islands will have to take examinations to secure new licenses, on the recommendation of the board of medical examiners recently appointed. The Japanese physicians have protested against passing new examinations. There are in all 31 physicians practicing in Hawaii.

Another Honor for Lister.—The Copley medal has been awarded this year to Lord Lister. This medal is regarded as the "blue ribbon of science." It was founded in 1709, by Sir Godfrey Copley, for distribution to the living authors of such philosophical research, either published or communicated to the Society, as migha appear to the Council to be deserving of that honor.—(*Philadelphia Medical Journal.*)

BOOK REVIEWS

A Text-Book on Diseases of Infancy and Childhood. For the Use of Students and Practitioners. By Henry Koplik, M. D., Attending Pediatrist to Mt. Sinai Hospital, New York; Ex-President American Pediatric Society, Etc. Octavo, 675 Pages, 169 Engravings and 30 Plates in Colors and Monochrome. Price, Cloth, $5.00 Net. Leather, $6.00 Net. Lea Bros. & Co., Publishers, 706-710 Sansom Street, Philadelphia, Pa.

Knowing Koplik's wide experience in the subject of which he writes, this book of his was picked up for review with the idea that something valuable was to be gained from a reading of it; and this idea proved to be correct. While the book contains the credited views of pediatrists of all nations, their statements have not been merely compiled. Koplik's own knowledge and long experience have made him an excellent judge of the value of other writers' work and what he selects from their monographs and their more extended writings is that which he has found to be good. The work, then, may properly be said to be authoritative and practical and is in these respects an ideal book for students of the subject of pediatrics Koplik's fellow-practitioners, too, may find the sum of modern knowledge on their specialty here, the text carefully edited, arranged and published.

The illustrations, where it was practicable, have been taken from life, the author's own patients serving as subjects. A large number of well considered tables and charts find a place in the pages, also, and form a valuable adjunct to the usefulness of the work. Koplik has put much of his own experience and much of his own personality into this book on a subject with which he is so familiar and the result is that the book is well worth having, be the reader student or practitioner. The publishers have done their share in seconding Koplik's work.

Disinfection and Disinfectants. A Practical Guide for Sanitarians, Health and Quarantine Officers. By M. J. Rosenau, M. D., Director of the Hygienic Laboratory and Passed Assistant Surgeon U. S. Public Health and Marine-Hospital Service, Washington, D. C. Illustrated. Pages, 344. P. Blakiston's Son & Co., Publishers, 1012 Walnut St., Philadelphia, Pa., 1902.

Rosenau's experience speaks through this small but complete volume, which embodies the latest and best methods of disinfection on either a small or a large scale, though public disinfection naturally claims the greater share of our author's attention. His work in disinfection, both in the laboratory as a scientific experimenter and in the field as an officer of the public health service, has well qualified him to speak on this most important subject. His book may be said to be a compend of modern knowledge on the subject of disinfection.

The physical agents for disinfection are first considered, that the gaseous disinfectants and the chemical solutions in use for the same purpose, the uses and purposes of insecticides, and the disinfection of houses, ships and objects. The book closes with a valuable chapter on disinfection for the communicable diseases.

A useful aid to the understanding of the reader are the illustrations, of which there are many, a number of them in halftone illustrating the apparatus in use by boards of health for disinfection on a large scale. Complete directions are given for the operation of the more complicated apparatus, with a few words on the salient points of each. We can heartily recommend this book of Rosenau.

A Text-Book of Anatomy. By American Authors. Edited by Frederic Henry Gerrish, M. D., Prefessor of Anatomy in the Medical School of Maine, Bowdoin College. Second Edition, Thoroughly Revised and Enlarged. In one Imperial Octavo Volume of 943 pages, with 1003 Engravings Engravings in Black and Colors. Cloth, $6.50, Net. Leather, $7.50, Net. Flexible Water-Proof Binding, for Use on the Dissecting-Table, $7.00, Net. Lea Bros. & Co., Publishers, Philadelphia and New York.

Inside of two years the first edition of this work, which gained enviable distinction for its editor, collaborators and publishers, was exhausted. The present form is the result of the demand for it. The work is claimed by its publishers to be the most richly illustrated book on the subject extant and it is certain that the engravings in this edition are not only numerous but well chosen and well executed. The work is already in use as a text-book in a large number of medical institutions and has even been received with favor on the other side of the Atlantic, where men of medicine are not too prone to look with favor on American anatomists' writings.

A change in illustrations in the second edition consists in replacing the schematic representation of the arteries, muscles and so on by a series of horizontal sections at different levels, with the names of the parts printed in the illustration. This is a valuable aid to the student, who should find this work an excellent one from which to study. The book is quite as well adapted to the use of the practitioner, whether physician or surgeon, as it is to the needs of the student. All may learn something from it with information in a conveniently arranged shape.

A Text-Book of Physical Diagnosis. For Students and Practitioners of Medicine. By Egbert Le Fevre, M. D., Professor of Clinical Medicine and Associate Professor of Therapeutics, University and Bellevue Medical College, Attending Physician to Bellevue and St. Luke's Hospitals, Etc., New York. 12mo, 1440 Pages with 74 Engravings and 12 Plates. Cloth, $2.75 Net. Lea Bros. & Co., Philadelphia and New York.

Le Fevre dedicates this small but complete book to his students, whose "Why?", he says, furnished the incentive for the work. Possibly with this in mind, he has gone into careful detail in much of his text, though he covers a large amount of ground at the same time. The book embodies the principles employed by the author in a successful career as a teacher in one of the largest medical colleges. He presents the most recent findings in the field of physical diagnosis, and since the ability to make an intelligent diagnosis is always of prime importance to the physician, young or old, the book should be of value to students other than those who have enjoyed the personal instruction of the author. The book contains a chapter on examination with the Roentgen rays and a number of clear and interesting plates are shown. The other illustrations are well chosen and executed and should prove full of information for the careful reader. The book's best excuse for entering a field of medical literature which is already under a reasonably thorough cultivation, is to be found in the pages of text in the book itself.

The Physician's Pocket Account Book, consisting of a Manilla-bound book of 208 pages and a leather case. By J. J. Taylor, M. D. Price, $1.00 complete. Subsequent books to fill the case, 40 cents each, or 3 for $1.00. Published by the Medical Council, Twelfth and by the *Medical Council*, Twelfth and Walnut Streets, Philadelphia, Pa.

We are strangers to this book, which combines a number of excellent features in its make-up. It is simple, convenient, neat and compact, has plenty of space for all necessary data and is well adapted for the use to which it is intended to be put. The blank-book itself is readily slipped out of the leather case, when it has been filled, or when the accounts in it have been entirely closed. It makes use of a one-entry system of book-keeping, and every facility is furnished for the accurate keeping of accounts. Most members of the profession need to have the matter of keeping accounts made very easy for them, and this form will prove a boon to them. Each account has its own page, and an index shows where each account is located. The form could not well be made more simple, nor more satisfactory.

The Medical News Visiting List for 1903. Weekly (dated for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book; with pocket, pencil and rubber. Seal Grain Leather, $1.25. Thumb-letter, 25 cents extra. Lea Bros. & Co., Publishers, Philadelphia and New York.

Every practitioner needs a visiting list in a handy form so that he may keep accurate track of his patients and their indebtedness to him. The form offered by Lea Bros. is simple, compact and very convenient for a busy man. The book opens with 32 pages of printed tables, containing useful information, including a full-page plate showing the incisions to be made for the ligation of arteries. The blank pages are well arranged and the book is printed on a good quality of tough paper, which will take a pencil or a pen.

The Physician's Visiting List (Lindsay & Blakiston's). For 1903. Fifty-second Year of its Publication. Arranged for 25 patients per day or week. Published also for 50, 75 and 100 patients per day or week, in two volumes. A perpetual edition is published with 1300 or 2600 names arranged for. Bound in Leather, with pocket, pencil, eraser, etc. P. Blakiston's Son & Co., Publishers, 1012 Walnut St., Philadelphia.

For more than half a century this form of visiting list has been on the market and each year the edition is printed larger than it was in the preceding year—proofs that it has gained a high reputation with the profession. The present form, in addition to the information carried in last year's issue, publishes special pages on incompatabilities, chemic, pharmaceutic and therapeutic, and a page on the immediate treatment of poisoning. It is an admirably designed and complete little pocket-record and an ever-handy ready-reference guide for the medical profession. It is likely to have a larger sale than ever this year.

The Physicians' Protective Accountant. Including Ledger of Monthly Balances and Index of Accounts and The Physicians' Protective Visiting List. Pages 250-64. Price, with 12 visiting lists, $2.00. Clinic Publishing Co., Ravenswood Station, Chicago, Ill.

A handy and an excellent form for the busy physician. A permanent ledger of monthly balances and index of accounts provides space for entries and necessary data, while a movable monthly visiting list gives the names of the patients, dates, services rendered and amount to be entered in the ledger. A thumb-index for the ledger and a simple index for the visiting list provide the means of ready reference. A three-year index occupies the inside front cover of the visiting list. One good feature of the outfit is that the accounts, when properly entered, will hold water in a court.

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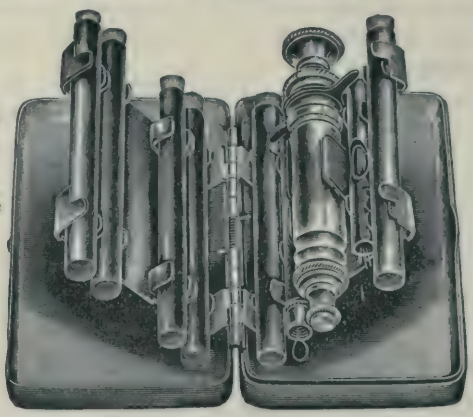

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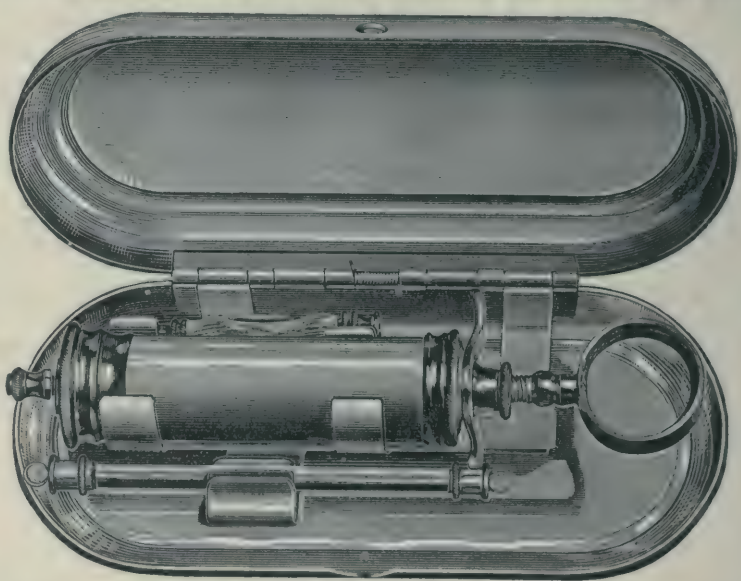

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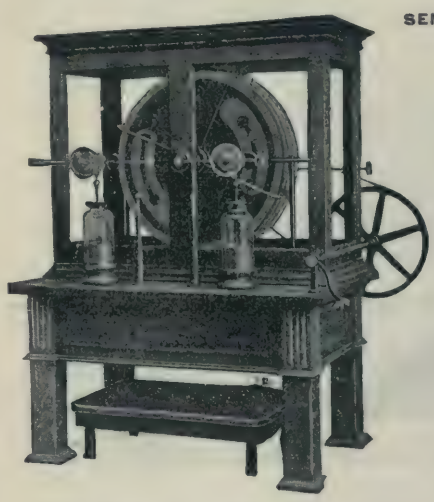

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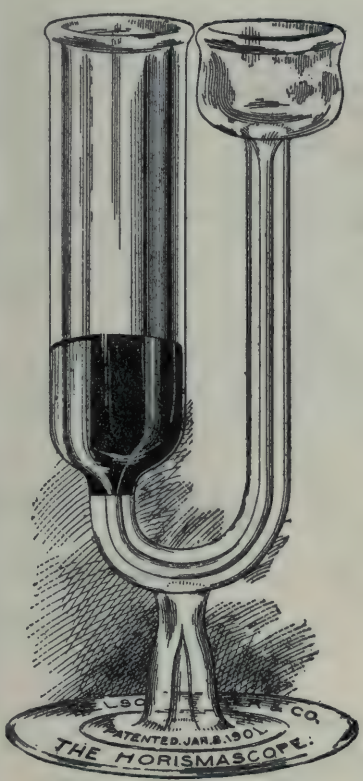

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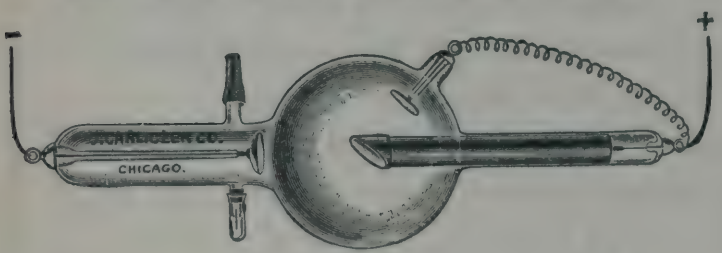

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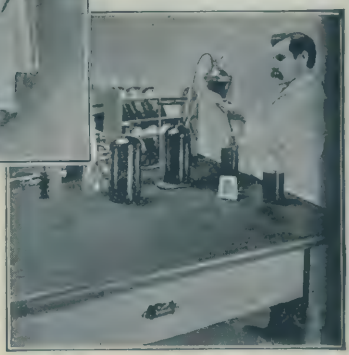

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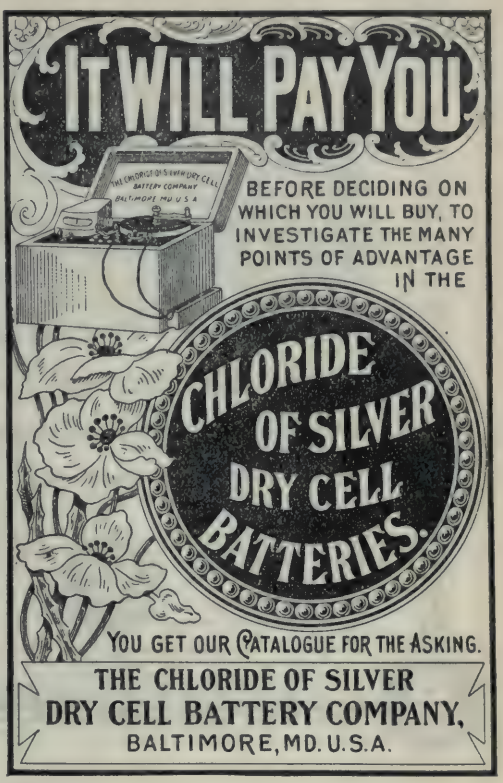
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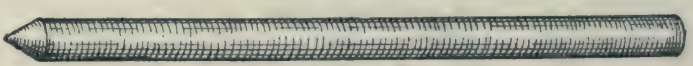

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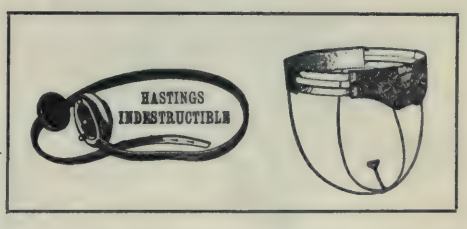

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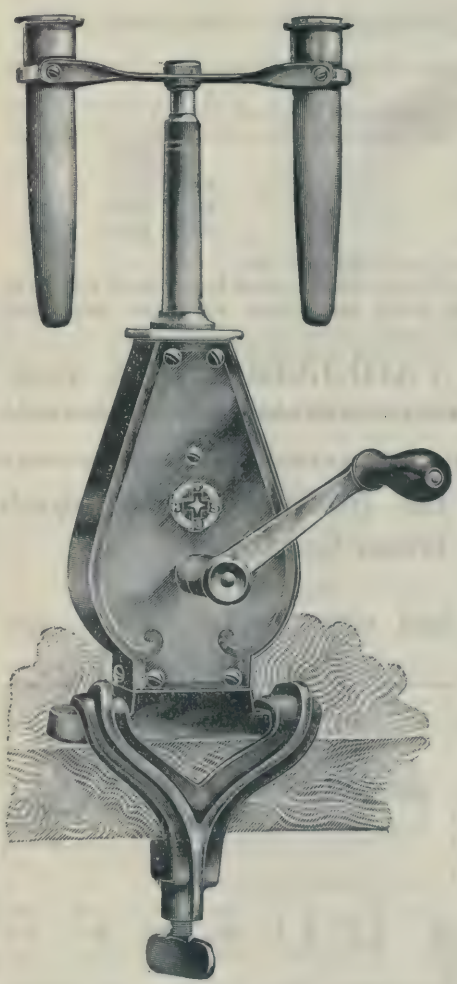

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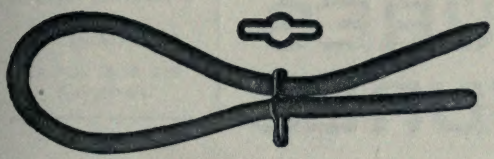

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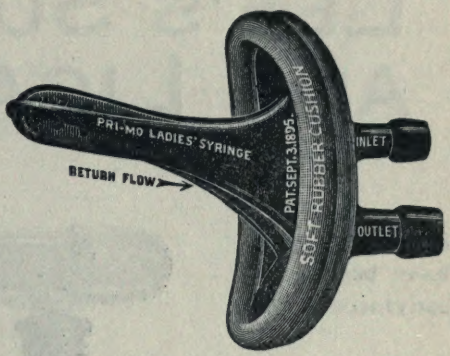

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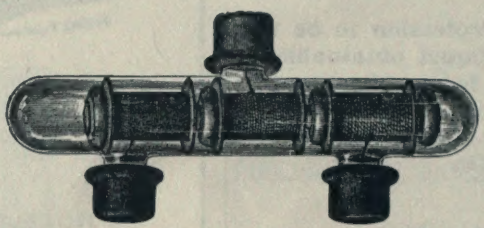

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